UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF MICHIGAN

UNITED STATES OF AMERICA,

Plaintiff,

And

NATURAL RESOURCES DEFENSE COUNCIL, INC. AND SIERRA CLUB,

Intervenor-Plaintiffs,

v.

DTE ENERGY COMPANY AND DETROIT EDISON COMPANY,

Defendants.

Civil Action No.
2:10-cv-13101-BAF-RSW

Judge Bernard A. Friedman

Magistrate Judge R. Steven Whalen

DEFENDANTS' MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

Defendants DTE Energy Company and Detroit Edison Company (collectively "Detroit Edison"), by counsel and pursuant to Local Rule 7.1, move this Court for an Order finding that the correct legal standard for evaluating "Routine Maintenance, Repair and Replacement" ("RMRR") is the "routine in the industry" standard. The "routine in the industry standard" assesses the "routineness" of a project by not looking only to the individual electric generating unit at issue, but also to the electric generating industry as a whole. In support of this Motion, Defendants rely on their Memorandum of Law in Support of Motion to Establish Correct Legal Standard on the Issue of Routine Maintenance, Repair and Replacement, filed contemporaneously herewith.

Respectfully submitted, this 18th day of July, 2011.

/s/ F. William Brownell

F. William Brownell
brownell@hunton.com
Mark B. Bierbower
mbierbower@hunton.com
Makram B. Jaber
mjaber@hunton.com
Hunton & Williams LLP
2200 Pennsylvania Avenue, NW
Washington, D.C. 20037
(202) 955-1500

Harry M. Johnson, III
pjohnson@hunton.com
Hunton & Williams
951 E. Byrd Street
Richmond, Virginia 23219
(804) 788-8784

Counsel for Defendants

Matthew J. Lund (P48632)
PEPPER HAMILTON LLP
100 Renaissance Center, 36th Floor
Detroit, Michigan 48243
lundm@pepperlaw.com
(313) 393-7370

Michael J. Solo (P57092)
DTE ENERGY
One Energy Plaza
Detroit, Michigan 48226
solom@dteenergy.com
(313) 235-9512

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing **DEFENDANTS' MOTION TO ESTABLISH CORRECT STANDARD ON ISSUE OF RMRR** was electronically filed with the Clerk of Court using the CM/ECF system, which will automatically send email notification of such filing to the following attorneys of record as follows:

Ellen E. Christensen
U.S. Attorney's Office
211 W. Fort Street
Suite 2001
Detroit, MI 48226
313-226-9100
Email: ellen.christensen@usdoj.gov

James A. Lofton
Thomas Benson
Justin A. Savage
Kristin M. Furrie
U.S. Department of Justice
Environmental and Natural Resource Div.
Ben Franklin Station
P.O. Box 7611
Washington, DC 20044
202-514-5261
Email: thomas.benson@usdoj.gov
justin.savage@usdoj.gov
kristin.furrie@usdoj.gov
jim.lofton@usdoj.gov

Holly Bressett
Sierra Club Environmental Law Program
85 Second St., 2nd Floor
San Francisco, CA 94105
Phone: (415) 977-5646
Email: Holly.Bressett@sierraclub.org

Andrea S. Issod
Sierra Club
85 2nd Street, 2nd Floor
San Francisco, CA 94105
415-977-5544
Email: andrea.issod@sierraclub.org

This 18th day of July, 2011.

/s/ F. William Brownell

UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF MICHIGAN

UNITED STATES OF AMERICA, Plaintiff, And NATURAL RESOURCES DEFENSE COUNCIL, INC. AND SIERRA CLUB, Intervenor-Plaintiffs, v. DTE ENERGY COMPANY AND DETROIT EDISON COMPANY, Defendants.	Civil Action No. 2:10-cv-13101-BAF-RSW Judge Bernard A. Friedman Magistrate Judge R. Steven Whalen

DEFENDANTS' MEMORANDUM OF LAW IN SUPPORT OF MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

STATEMENT OF ISSUES PRESENTED

1. Consistent with the majority of courts that have addressed the issue, should this Court apply the "routine in the industry" standard when deciding whether the Monroe 2 projects represent "routine maintenance, repair, and replacement" ("RMRR")?

Defendants' answer: Yes.

CONTROLLING OR OTHER APPROPRIATE AUTHORITY

FEDERAL CASES

FEDERAL STATUTES, REGULATIONS, AND OTHER MATERIALS

STATE REGULATIONS

PRELIMINARY STATEMENT

Defendants DTE Energy Company and Detroit Edison Company (collectively "Detroit Edison")[1] submit this Memorandum in Support of their Motion to Establish Correct Legal Standard on the Issue of "Routine Maintenance, Repair and Replacement" ("RMRR"). Plaintiff filed this case alleging that Detroit Edison failed to obtain a preconstruction permit before undertaking certain projects that, in Plaintiff's view, constituted "major modifications" triggering the New Source Review ("NSR") permitting requirements. The applicable regulations, though, exclude projects that are RMRR from the definition of "major modification." Detroit Edison seeks confirmation that -- consistent with the clear majority of courts that have addressed the issue -- the proper standard for determining whether a project represents "RMRR" is whether the project is "routine in the industry." The "routine in the industry" standard assesses the "routineness" of a project by looking not only to the individual electric generating unit at issue (as Plaintiff would artificially limit the analysis), but also to the electric utility industry as a whole. Confirming the correct legal standard will assist both the Court and the parties in evaluating and presenting the evidence at trial.

BACKGROUND

I. Statutory and Regulatory Background Relevant to RMRR Issue

The RMRR issue must be viewed in the context of the historical distinction in the Clean Air Act ("CAA") between *existing* sources and *new* sources. As explained below, "routine" activities are excluded from the Clean Air Act's New Source Review ("NSR") programs because NSR was never intended to cover existing sources of pollution unless they are modified to such

[1] Detroit Edison is a wholly owned subsidiary of the holding company, DTE Energy Company, and is the sole owner and operator of the Monroe Power Plant. Defendants deny that DTE Energy is an operator of Monroe Unit 2, and do not intend to waive this or any claims or defenses by defining the defendants as "Detroit Edison" here.

an extent as to become essentially "new" sources of pollution. Routine maintenance, repair and replacement at an existing source has therefore always been excluded from NSR requirements. By seeking an overly restrictive legal standard for evaluating RMRR in litigation, Plaintiff is trying to emasculate the historical exclusion of existing sources from the scope of NSR.

A. The Current Law

In general, the NSR rules[2] require that a preconstruction permit be obtained whenever a new source is to be built or when an existing major stationary source is to undertake a project that constitutes a "major modification" to that source. *See, e.g.*, MICH. ADMIN. CODE R. 336.2802. As relevant here, the definition of "major modification" tracks the statutory language in requiring that, for a proposed activity to constitute a "modification," there must be (i) a "physical or operational change" that (ii) "results in" (*i.e.*, causes) (iii) a "significant emissions increase." *Id.* 336.2801(aa)(i); 40 C.F.R. pt. 51, App. S. The NSR rules provide that a "[p]hysical change...shall not include…[r]outine maintenance, repair, and replacement." MICH. ADMIN. CODE R. 336.2801(aa)(iii). Consequently, to prevail in this case, EPA must show that the Project was not "routine" maintenance, repair or replacement.[3]

B. The Historical Focus of New Source Review on New Sources

History confirms that the NSR programs were not intended to encompass activities that routinely occur at existing facilities within an industry. In its amendments to the CAA over

---

[2] Two different NSR programs are at issue here. The first is the Prevention of Significant Deterioration ("PSD") program, and the second is the Non-Attainment New Source Review ("NNSR") program. Both sets of the regulations are the same as they pertain to the RMRR issue, and Detroit Edison refers to them collectively as the "NSR rules" in this Memorandum.

[3] In its March 2010 notification to Michigan Department of Environmental Quality, Detroit Edison explained that because the replacement projects were common industry repair and replacement work, they could not be a "physical change" under NSR. *See* Ex. 2 to Boyd Decl. (Ex. 3 to Detroit Edison's Memorandum in Opposition to Plaintiff's Motion for Preliminary Injunction (Docket # 46-4).

nearly four decades, Congress repeatedly chose not to require existing sources to be subject to the requirements for new sources. Instead, Congress chose to regulate existing emissions sources only as necessary to meet national air quality standards developed by EPA and implemented by the states. Congress enacted the NSR programs to evaluate and to minimize the impact of new sources of emissions.

In 1970, Congress directed EPA to develop National Ambient Air Quality Standards ("NAAQS") to protect the nation's public health and welfare with an adequate margin of safety. 42 U.S.C. § 7409. The states, in turn, were to develop plans called "State Implementation Plans" or "SIPs" that established source-by-source emissions limits to meet the NAAQS. *Id.* § 7410. The 1970 Amendments also directed EPA to issue New Source Performance Standards ("NSPS") to minimize the environmental impact of adding new emissions capacity.[4] Congress debated whether to subject existing sources to NSPS, but chose not to do so.[5] Thus, NSPS apply only to new sources of emissions — *i.e.*, newly-constructed emission units or "modifications" of existing units. *Id.* § 7411(a)(2).

In 1971, EPA promulgated rules in response to the 1970 CAA Amendments, including a regulatory definition of "modification" that tracked the statutory definition almost verbatim. *See* 36 Fed. Reg. 24,876 (Dec. 23, 1971). These rules specified that "[r]outine maintenance, repair, and replacement shall not be considered physical changes." *Id.* at 24,877 (codifying 40 C.F.R. § 60.2(h)). In 1974, EPA proposed revised NSPS rules to clarify "the intent of section 111 of controlling facilities only when they constitute a new source of emission." 39 Fed. Reg. 36,946

---

[4] "The legislative history of § 111 [NSPS] . . . reveals that Congress was most concerned that new plants — new sources of pollution — would have to be controlled to the greatest degree practicable if the national goal of a cleaner environment was to be achieved." *Essex Chem. Corp. v. Ruckelshaus*, 486 F.2d 427, 434 n.14 (D.C. Cir. 1973).

[5] *See* S. REP. NO. 91-1196 at 15-18 (1970) (Ex. 1).

(Oct. 15, 1974). In the final rule, EPA specified that a modification shall not include "maintenance, repair and replacement" projects that are "routine for a source category." 40 C.F.R. § 60.14(e)(1) (1976) (Ex. 2); 40 Fed. Reg. 58,416, 58,419 (Dec. 16, 1975).

In 1977, Congress further amended the CAA by enacting the two programs at issue in this case — the PSD program and the companion NNSR program. Both programs incorporated the definition of "modification" from NSPS. *See* 42 U.S.C. § 7501(4) (NNSR) ("... 'modifications'... mean[s] the same as the term 'modification' as used in section 7411(a)(4) [NSPS]."); *id.* § 7479(2)(C) (PSD) ("The term 'construction' . . . includes the modification (as defined in section 7411(a) [NSPS] . . . . "). Three years later, EPA promulgated the final 1980 NSR rules and retained the long-standing RMRR exclusion. *See* 40 C.F.R. § 52.24(f)(5)(iii)(a) (NNSR); § 52.21(b)(2)(iii)(a) (PSD). And, in 2002, EPA promulgated revisions to the NSR rules that again retained the RMRR exclusion. These 2002 rules are applicable today.

C. The Regulatory Interpretation of "Routine"

EPA itself has answered the question whether "routine" is evaluated based on an industry as a whole or rather based on a single unit. Speaking in its rulemaking capacity in 1992, EPA confirmed that, like the RMRR exclusion under NSPS, the RMRR exclusion under NSR covers projects that are "routine *for a source category*" (i.e., routine in the industry):

> the determination of whether the repair or replacement of a particular item of equipment is "routine" under the NSR regulations, while made on a case-by-case basis, must be based on the evaluation of *whether that type of equipment has been repaired or replaced by sources within the relevant industrial category*.

57 Fed. Reg. 32,314, 32,326 (July 21, 1992) ("WEPCo Rule") (emphasis added). This regulatory pronouncement of EPA has never been rescinded, withdrawn, or revoked.

The genesis of the WEPCo Rule is itself instructive on the industry-wide focus of RMRR. In 1988, Wisconsin Electric Power Company ("WEPCo") proposed a "renovation"

project at its Port Washington Plant. Given the nature and extent of the project, WEPCo sought an "applicability determination" from EPA whether the project would be deemed a "modification" triggering PSD. For the first time in the nearly thirty year history of NSR, EPA determined that a project was in fact a "major modification" triggering NSR.[6] To assess whether the proposed projects (which involved "extensive renovation[s]," including "repair and replacement of the turbine - generators, boilers, mechanical and electrical auxiliaries and the common plant support facilities"[7]) were "routine" for RMRR purposes, the EPA introduced a multi-part test, known today as the WEPCo test: "In determining whether proposed work at an existing facility is 'routine,' EPA makes a case-by-case determination by weighing the nature, extent, purpose, frequency, and cost of the work, as well as other relevant factors, to arrive at a common-sense finding." Clay Memorandum at 3 (Ex. 3). Notably, EPA compared the projects to the electric utility industry at large. It "found no examples of steam drum replacement at aged electric generating facilities," and explained that WEPCo was unable to provide any examples of other coal-fired power plants replacing plate-type air heaters similar to WEPCo's. Final WEPCo Determination at 4 (Ex. 4); Revised WEPCo Determination at 7 (Ex. 5). Given the unprecedented nature of the WEPCo projects in the industry, EPA concluded they were not RMRR. The Seventh Circuit subsequently affirmed EPA's conclusion regarding the RMRR issue. *See Wisconsin Elec. Power Co. v. Reilly*, 893 F.2d 901 (7th Cir. 1990).

After the Seventh Circuit's decision and before promulgating the WEPCo Rule, EPA reiterated that repair and replacement projects common within the electric utility industry would

---

[6] *See* WEPCo NSR Applicability Determination, D. Clay mem. to D. Kee (Sept. 9, 1988) ("Clay Memorandum") (Ex. 3); L. Thomas letter to J. Boston (Oct. 14, 1988) ("Final WEPCo Determination") (Ex. 4); D. Clay letter to J. Boston (Feb. 15, 1989) ("Revised WEPCo Determination") (Ex. 5).

[7] *WEPCo v. Reilly,* 893 F.2d 901, 905-06 (7th Cir. 1990).

not trigger PSD. For example, a 1990 General Accounting Office report commissioned by Congress concluded that "EPA officials do not consider WEPCo's project typical of most utility life extension projects, and they expect that the ruling will not significantly affect utilities' decisions to undertake power plant life extension projects." *See* "Electric Supply: Older Plants' Impact on Reliability and Air Quality," GAO Report to the Chairman, Subcomm. on Energy and Commerce, U.S. House of Reps. (Sept. 1990) at 29 ("GAO Report") (Ex. 6); *id.* at 31 ("Lending evidence to the officials' statements, EPA's 1989 emission forecast assumed that the WEPCo decision would not result in a significant number of additional power plants having to comply with the NSPS and the PSD program requirements.").

EPA was fully aware of, and agreed with, the GAO's conclusions.[8] Chairman Dingell formally asked EPA about *WEPCo* and the GAO Report's assessment. *See* J. Dingell letter to J. Watkins (Oct. 9, 1990) (Ex. 8). EPA responded that "[a]s indicated in the GAO report, it is expected that most utility projects will <u>not</u> be similar to the WEPCo situation" and that "the [*WEPCo*] ruling is not expected to significantly affect power plant life extension projects." W. Rosenberg letter to J. Dingell at 5-6 (June 19, 1991) (emphasis in original) (Ex. 9). The WEPCo Rule in 1992 thereafter codified EPA's view that the correct standard for whether repair or replacement is routine "*must* be based on … the industrial category" and not "the unit." WEPCo Rule, 57 Fed. Reg. at 32,326 (emphasis added). Likewise in 1995, an EPA Assistant Administrator advised the electric utilities industry that "EPA believes that the routine maintenance exclusion already included in the existing NSR regulations . . . has the effect of

[8] Before the GAO Report was issued, GAO sent EPA a fact sheet listing most of the information to be included in the Report and requested comments from EPA. *See* S. Tiber mem. to N. Kete (Apr. 10, 1990), attaching GAO Fact Sheet, "Utility Decisionmaking for Aging Powerplants" (Ex. 7).

excluding 'routine restorations'" from the requirements of the NSR programs.[9]

D. EPA's Enforcement Initiative

In late 1999, the consistent and longstanding definition of "routine" as "routine in the industry" suddenly became inconvenient for EPA. In an action the agency itself admitted was "unprecedented," EPA commenced its utility "enforcement initiative" by charging twenty-four separate power plants with NSR violations.[10] Since then, EPA has taken or threatened enforcement action against the vast majority of utilities in the country, including this lawsuit against Detroit Edison, for the types of repair and replacement projects that are -- and have been for many years -- routine throughout the electric utility industry. By necessity, each charge is based upon a narrowed interpretation of RMRR that re-defines "routine" relative only to the unit at issue. As demonstrated below, this litigation position is both incorrect and an impermissible substitute for a formal agency rulemaking.

ARGUMENT

I. The Proper Standard Is "Routine In The Industry"

For the RMRR analysis, it is undisputed that the *WEPCo* multifactor test applies. This test considers (1) the project's nature and extent; (2) its purpose; (3) its frequency; and (4) its cost — and no single factor is dispositive. *See WEPCo*, 893 F.2d at 910. However, EPA's enforcement initiative has generated a "central disagreement between [the utility industry] and EPA . . . whether 'routine' should be defined relative to an industrial category or to a particular unit." *TVA v. Whitman*, 278 F.3d 1184, 1189 n.3 (11th Cir. 2002), *opinion withdrawn in part*,

---

[9] *See* May 30, 1995, EPA "Response to Issues Raised by Industry on Clean Air Act Implementation Reform," at 19, *attached to* Letter from Mary D. Nichols, EPA Assistant Administrator for Air and Radiation, to William Lewis (May 31, 1995) (Ex. 10).

[10] DOJ Press Release on behalf of EPA, "U.S. Sues Electric Utilities in Unprecedented Action to Enforce the Clean Air Act" (Nov. 3, 1999) (Ex. 11), *available at* http://www.justice.gov/opa/pr/1999/November/524enr.htm.

336 F.3d 1236 (11th Cir. 2003). Thus, this Court must decide which potential interpretation of the RMRR exclusion applies in this case: (i) the "routine in the industry" standard published by EPA in the *Federal Register* and adopted by the majority of district courts to have considered the issue, or (ii) the "routine at the unit" standard urged by EPA in this litigation.

The structure of the NSR provisions makes clear that RMRR should be assessed on an "industry" standard. These rules are predicated on an industry category approach. The Act defines its PSD applicability according to categories of "major emitting facilit[ies]" established by the regulations. *See* 42 U.S.C. § 7479(1). Similarly, the NNSR provisions speak in terms of "class or category of source." 42 U.S.C. § 7501(3). Until EPA began its enforcement initiative in 1999, EPA was consistent in its use of an industry-wide standard for determining what maintenance, repair and replacement activities are "routine." During the rulemaking clarifying how NSR should be applied to existing power plants following *WEPCo*, EPA specifically addressed the RMRR exclusion:

> EPA is today clarifying that the determination of whether the repair or replacement of a particular item of equipment is "routine" under the NSR regulations, while made on a case-by-case basis, must be based on the evaluation of *whether that type of equipment has been repaired or replaced by sources within the relevant industrial category.*

57 Fed. Reg. 32,314, 32,326 (emphasis added). As the majority of courts considering the issue have recognized, that statement (and others) by EPA was clear and unequivocal, and EPA should be bound by it having never modified or revoked it.

A. Most Courts Have Adopted The "Routine In The Industry" Standard.

The great weight of authority — including the most recent district court decisions on the issue — has found "routine in the industry" to be the proper standard for assessing RMRR. Five U.S. District Courts — the Eastern District of Tennessee, Middle District of North Carolina, Western District of Pennsylvania, Northern District of Alabama, and Eastern District of

Kentucky — have expressly adopted a version of the "routine in the industry standard" over the EPA's more narrow unit-based standard. And, while not expressly articulating the industry standard, the only Circuit Court of Appeals to have addressed the issue, the Seventh Circuit in *WEPCo*, unquestionably assessed the project at issue by comparing it to *other projects in the utility industry*. A review of this authority demonstrates that the "routine in the industry" standard is correct and should be applied in this case.

1. The Seventh Circuit's *WEPCo* opinion

In *WEPCo*, the Seventh Circuit described the proposed Port Washington project as a "highly unusual, if not unprecedented, and costly project." 893 F.2d at 911 (citing Clay Memorandum at 4). Notably, in considering RMRR, the Seventh Circuit assessed the project by looking at the utility *industry* as a whole: "WEPCo did not identify, and EPA did not find, even a single instance of renovation work at any electric utility generating station that approached the Port Washington life extension project in nature, scope or extent." *Id.* Regarding the proper standard for the exclusion, one court recently described the significance of *WEPCo* as follows:

> In the applicability determination, as well as in the appeal to the Seventh Circuit, the EPA compared the proposed projects at the Port Washington facility to projects undertaken at other electric utility facilities to show that the Port Washington projects were not "routine." By making these comparisons in the *WEPCo* case, the EPA, (and the Seventh Circuit in affirming the EPA's decision), confirmed the relevance of industry practice in the RMRR analysis.

U.S. v. Duke Energy Corp. ("Duke IV"), No. 1:00CV1262, 2010 WL 3023517, at * 3 (M.D.N.C. July 28, 2010) (citing *WEPCo*, 893 F.2d at 911); *see also Penn. Dep't. of Envtl. Prot. v. Allegheny Energy, Inc.*, No. 05-885, 2008 WL 4960100, at * 4 (W.D. Pa. Sept. 2, 2008) ("[T]he [Seventh Circuit] conducted its RMRR analysis with an eye toward whether the project before it was 'routine in the industry', taking its lead from the EPA." (citing *WEPCo,* 893 F.2d at 911-12)). Thus, *WEPCo* makes clear that RMRR considers routineness in the relevant *industry*.

2. The *Duke* opinions

In the initial *Duke* opinion, the court held that the RMRR exclusion must be analyzed according to the source or industry category. *See U.S. v. Duke Energy Corp. ("Duke I")*, 278 F. Supp. 2d 619, 631-32 (M.D.N.C. 2003).[11] *Duke I* observed that EPA itself had used an industry-focused approach in its WEPCo applicability determination:

> If the relevant inquiry under the RMRR exemption is whether a particular activity is "routinely performed at an individual unit" as the EPA now asserts, the EPA in WEPCO could have simply concluded its RMRR inquiry with the admission by WEPCO that the proposed project would occur only once or twice during a unit's expected life cycle. The EPA, however, requested that WEPCO "submit information regarding the frequency of replacement of steam drums." . . . The EPA distinguished several of the projects [submitted by WEPCO] from WEPCO's project primarily on the ground that they did not involve utility boilers, *i.e.*, they were not in the same source category. . . . The fact that no other utilities replaced steam drums can be relevant only if the appropriate inquiry is what is routine within the industry.

Id. at 633-34.

Duke I rejected EPA's argument that the agency's interpretation was entitled to deference, observing that an agency interpretation that conflicts with a prior interpretation is entitled to considerably less deference than a consistently-held agency view. *Id.* at 642. The court also emphasized that the EPA's post-*WEPCo* statements supported a "routine in the industry" standard. For example, "EPA's 1989 emission forecast assumed that the WEPCO decision would not result in a significant number of additional power plants having to comply with the NSPS and the PSD program requirements." *Id.* at 637 (quoting GAO Report at 31). As the court concluded, "[t]hrough the EPA's statements in the Federal Register, its statements to

[11] Although *Duke* has a somewhat lengthy and complex procedural history, its resolution of the RMRR issue was relatively straightforward. On appeal, neither the Fourth Circuit nor the Supreme Court reached the RMRR issue. On remand, the United States sought reconsideration of the RMRR aspect of *Duke I*, but the district court issued reaffirmed the "industry" standard.

the regulated community and Congress, and its conduct for at least two decades the EPA has established an interpretation of RMRR under which routine is judged by reference to whether a particular activity is routine in the industry." *Id.* at 637.[12]

EPA sought to vacate *Duke I* in its entirety when the case was reassigned to a new judge after the Supreme Court remand. The court revisited the issue in a new analysis and again rejected EPA's request as to "routine," reaffirming that:

> The EPA is bound by its own interpretation of the PSD regulations, which have consistently referenced industry standards. *Duke I* thoroughly evaluated the statements of the EPA during the WEPCO determination for this case and the EPA's public statements regarding the RMRR exception. The regulatory history establishes that reference to other units in an industrial category must be part of the RMRR analysis and this part of the WEPCO analysis remains unaffected by the Supreme Court's holding in *Duke III*.

Duke IV, at * 7. The court stated that it would examine routineness both from a unit perspective and from an industry standpoint. *Id.*

3. The *Alabama Power* opinions.

The Northern District of Alabama also confirmed the "routine within the industry" test, based on a careful analysis of the history of the RMRR provision. *See U.S. v. Alabama Power Co. ("Alabama Power I")*, 372 F. Supp. 2d 1283, 1307 (N.D. Ala. 2005). The court conducted

[12] In finding that RMRR should be defined relative to an industry, *Duke I* also relied on legislative intent, "concluding that when Congress incorporated the NSPS statutory definition of modification into the PSD amendments, it also incorporated the regulations implementing the NSPS program." *Duke IV*, 2010 WL 3023517, at * 3 (describing *Duke I*, 278 F. Supp. 2d at 629). Based on that line of reasoning, because the NSPS provision refers to maintenance, repair, and replacement that is "routine for a source category," *Duke I* found that the PSD RMRR exclusion also covers those projects that are routine for a source category. *Duke I*, 278 F. Supp. 2d at 632. However, without addressing the RMRR issue, the Supreme Court has clarified that "PSD regulations on 'modification' simply cannot be taken to track the Agency's regulatory definition under the NSPS." *Duke III*, 549 U.S. at 577. Accordingly, in *Duke IV*, the district court vacated the *Duke I* ruling on RMRR to the extent it "relied on incorporation of the NSPS regulations into the PSD regulations." *See Duke IV*, 2010 WL 3023517, at * 6. However, *Duke IV* expressly reaffirmed the remaining bases set forth in *Duke I* for application of a "routine in the industry" standard. *Id.* at * 6-7.

an extensive review of EPA's prior statements about the RMRR exclusion and the facts surrounding EPA's litigating position and applied the factors set out by the Supreme Court in *U.S. v. Mead Corp.*, 533 U.S. 218 (2001). *See Alabama Power I,* 372 F. Supp. 2d at 1306-07.[13] The court found that the "routine at the unit" test failed four of the five *Mead* factors — the degree of the agency's care, consistency, formality, and persuasiveness of the agency's position. *Id.* at 1306 ("[I]n the court's eyes, [EPA's position] only pass[es] the 'expertness' prong of *Mead.*"). The court emphasized that EPA's interpretation was entitled to minimal deference due to its prior inconsistent positions on the proper RMRR standard: "EPA's arguments sound more in 'litigation position', which is never entitled to *Chevron* deference, than they do an agency implementation/interpretation of ambiguous statutory language, which is entitled to *Chevron* deference." *Id.* As the court explained: "Given the EPA's zigs and zags represented by its contradictory post-*WEPCO* statements and rules . . . the court cannot say that EPA's interpretation of its rules is due to be afforded *Chevron* deference. EPA admits, as it must, that it has not spoken with one voice, or a consistent voice, or even a clear voice, on this issue." *Id.* Thus, *Alabama Power I* rejected EPA's litigating position, and instead applied the test for "routine" published by EPA in 1992 in the *Federal Register. Id.* at 1290 (comparing EPA's current litigating position with prior published regulatory statements); *id.* at 1307 (adopting routine in the industry test).

---

[13] In *Mead*, the Supreme Court held that deference to an agency's interpretation is appropriate only where "it appears that Congress delegated authority to the agency generally to make rules carrying the force of law, and that the agency interpretation claiming deference was promulgated in the exercise of that authority." 533 U.S. at 226-27. Where it is not (as with the "routine at the unit" test), courts should look to "the degree of the agency's care, its consistency, formality, [] relative expertness, and to the persuasiveness of the agency's position." *Id.* at 228. S*ee also Alaska Dep't. of Envtl. Conserv. v. Envtl. Prot. Agency*, 540 U.S. 461, 487 (2004) ("[EPA's] interpretation in this case, presented in internal guidance memoranda, however, does not qualify for the dispositive force described in *Chevron.*").

The court reaffirmed its ruling on the proper RMRR standard in a separate opinion three years later, just as her sister court in *Duke IV* had done. *See U.S. v. Alabama Power Co. ("Alabama Power II")*, 681 F. Supp. 2d 1292 (N.D. Ala. 2008).[14] The court explained:

> It would take a strained reading of the detailed and annotated review of the relevant history set out by the Middle District of North Carolina in *Duke I* to reach a different conclusion from that of *Duke I*. This court believes it is superficial and insufficient to quote the Clay Memorandum and say it forecloses all further discussion. The EPA continued to publish statements about enforcement and RMRR after the Clay Memorandum. Those statements did not occur in a vacuum; the court believes the EPA meant what it said when it called the modifications in *WEPCO* extraordinary and that the EPA did not anticipate bringing additional enforcement actions because of *WEPCO*. The fact that years passed before it did so speaks for itself. The electric utility industry was reading what the EPA was publishing, *e.g.*, EPA's response to Congressman Dingell's "inquiry."

Alabama Power II, 681 F. Supp. 2d at 1309 (citation omitted). *Alabama Power II* concluded by holding that it would determine whether the projects at issue fell under the RMRR exclusion by applying the WEPCo multi-factor test "'with reference to the industry as a whole, not just the particular unit at issue.'" *Id.* at 1312 (quoting *Alabama Power I*, 498 F. Supp. 2d at 993).

4. The *East Kentucky Power Cooperative* opinion

In *U.S. v. East Kentucky Power Cooperative, Inc. ("EKPC")*, 498 F. Supp. 2d 976 (E.D. Ky. 2007), the court thoroughly reviewed prior case law and also concluded that the "routine in the industry" standard is the proper standard for RMRR. The court observed that

> when, as here, the regulatory agency takes an inconsistent view of the regulations, makes inconsistent statements with respect to the regulation, and also enforces the regulation with no discernible consistency (which was the situation at least as of the time the work at issue in this case commenced), the weight to be given that

[14] In light of the Supreme Court's decision in *Duke III*, the *Alabama Power II* court vacated in part its earlier opinion on the "correct legal tests." However, it vacated only that part of the earlier opinion that addressed the emissions increase issue; it did not vacate its prior ruling that the RMRR determination was to be made on an "industry" basis. *See* Order Vacating in Part Memorandum on Correct Legal Tests, *U.S. v. Alabama Power Co.*, Civil Action No. 2:01-CV-152 (N.D. Ala. Feb. 25, 2008) (Ex. 12).

> position diminishes considerably in the Court's view. Looking at all the factors outlined in *Mead* with respect to the "fair measure of deference" to be afforded to an agency administering its own regulations, the Court would have to agree with the *Alabama Power Co.* court that the only factor that favors deference to the EPA's current position on the RMRR exclusion is its relative expertness.

EKPC, 498 F. Supp. 2d at 993 (citation omitted). The court concluded:

> [T]he Court finds that the *Duke* case presents a persuasive rationale for rejecting the EPA's position . . . . [T]he Court holds that it will ultimately determine whether EKPC's projects fall under the RMRR exclusion by applying the WEPCO multi-factor test — nature and extent, purpose, frequency, and cost — with reference to the industry as a whole, not just the particular EKPC unit at issue.

Id. at 993-94 (emphasis in original).

5. The *Allegheny* opinion

In *Pennsylvania Department of Environmental Protection v. Allegheny Energy, Inc.*, No. 05-885, 2008 WL 4960100, at * 7 (W.D. Pa. Sept. 2, 2008), the court conducted a detailed examination of the prior RMRR rulings and held that "routine in the industry" is the proper standard.[15] The court started with an analysis of *WEPCo*, observing that the Seventh Circuit "conducted its RMRR analysis with an eye toward whether the project before it was 'routine in the industry', taking its lead from the EPA." *Allegheny*, 2008 WL 4960100, at * 4 (quoting *WEPCo*, 839 F.2d at 911-12). The court then noted that, "[f]ollowing *WEPCO*, the EPA clarified its interpretation of RMRR in the Federal Register," in which EPA opined that the

[15] The initial *Allegheny* decision was a Report and Recommendation by a Magistrate Judge. That ruling was subsequently adopted by the district court. *See Pa. Dep't of Envtl. Prot. v. Allegheny Energy, Inc.*, No. 02:05cv885, 2008 WL 4960090, at *8 (W.D. Pa. Nov. 18, 2008) ("The Magistrate Judge thoroughly analyzed the two competing lines of cases and the prior interpretations of the EPA in explaining why the 'routine in the industry' test should be applied. The Court adopts this portion of the [Report and Recommendation]. Notably, in the WEPCO Rule, EPA stated that the RMRR analysis 'must be based on the evaluation of whether that type of equipment has been repaired or replaced by sources within the relevant industrial category.' 57 Fed. Reg. at 32,326."); *Allegheny Energy*, 2010 WL 1541457, at *6 ("[A]t trial, we will try Allegheny's RMRR defense and will apply the 'routine in the industry' standard to Allegheny's RMRR defense.").

RMRR determination "'must be based on the evaluation of whether that type of equipment has been repaired or replaced by *sources within the relevant industrial category*.'" *Id.* (quoting 57 Fed. Reg. 32,314, 32,326 (July 21, 1992) (emphasis supplied by court). The court observed that "[t]his stance appears to comport with the [Seventh Circuit's] ruling in *WEPCO*, which deferred to the EPA's original interpretation of RMRR." *Id.*

Allegheny then noted that, "[i]n subsequent litigation, . . . the EPA narrowed its interpretation of RMRR." *Id.* at *5. The court examined the competing lines of cases and concluded that "we will follow the lead of the Courts in [*WEPCo, EKPC, Alabama Power and Duke I*], which hold that the RMRR exclusion should be analyzed by looking at whether a project was routine in the industry as a whole." *Id.* at *7.

6. The *TVA* opinions

Finally, the Eastern District of Tennessee has twice held that the "routine in the industry" standard is proper. *See National Parks Conservation Ass'n v. TVA ("TVA I")*, 618 F. Supp. 2d 815 (E.D. Tenn. 2009); *National Parks Conservation Ass'n v. TVA ("TVA II")*, No. 3:01-CV-71, 2010 WL 1291335, at *24 (E.D. Tenn. Mar. 31, 2010) ("The Court answers the question of whether these projects are 'routine' within the meaning of the [RMRR] exclusion . . . by examining projects in both the industry as a whole and at [the unit] in particular.").

Ruling on summary judgment, *TVA I* stated that it was "persuaded by the reasoning of those courts that have adopted the 'routine in the industry' standard." 618 F. Supp. 2d at 825. The court observed that the inquiry conducted by the Seventh Circuit and EPA in *WEPCo* "essentially compare[d] the unit [at issue] with others in the industry." *Id.* The court found EPA's subsequent promulgation of the WEPCo Rule in 1992 to clarify that "routine" was to be determined on an industry-wide basis. *Id.* The court further observed that "[a] 'routine in the industry' standard is also consistent with the RMRR analysis, which requires a case-by-case

determination that weighs the nature, extent, purpose, frequency, and cost of the work." *Id.* After hearing evidence on the RMRR issue at trial and applying the "routine in the industry" standard, *TVA II* ruled that the projects at issue -- which were virtually identical to the projects at issue in this case -- were "properly categorized as routine maintenance, repair, and replacement." *TVA II*, 2010 WL 1291335, at *24-31.

7. The Minority View

Against the weight of recent authority discussed above, only one court has deferred completely to EPA's interpretation and adopted fully the "routine at the unit" standard. *See U.S. v. Ohio Edison*, 276 F. Supp. 2d 829, 861 (S.D. Ohio 2003) ("[w]hether an activity can be considered 'routine maintenance, repair or replacement' is more appropriately judged by how frequently the activity has been performed at the particular unit at issue."). Two other courts have recognized a hybrid analysis, combining routine at the unit with a recognition that routine in the industry is relevant. The U.S. District Court for the Southern District of Indiana deferred to EPA's unit-based interpretation, but acknowledged that "[h]ow often similar projects are undertaken throughout the industry may inform the analysis." *U.S. v. Southern Ind. Gas and Elec.*, 245 F. Supp. 2d 994, 1009 (S.D. Ind. 2003) ("SIGECO"); *id.* at 1016 ("*WEPCO* supports the view that the frequency of the project at the particular unit and the frequency of the project within [the] industry are both relevant considerations.") (emphasis in original); *U.S. v. Cinergy*, 495 F. Supp. 2d 909, 930-31 (S.D. Ind. 2007) ("The frequency factor in RMRR analysis includes consideration of how frequently a type of repair or replacement is done at a particular unit *as well as how frequently it is done within the industry.*") (emphasis added). Likewise, the District of Wisconsin, without explanation, applied the "routine at the unit test," but acknowledged that courts have recognized "'[t]he frequency factor includes a consideration of how frequently a type of repair or replacement is done at a particular unit *as well as how frequently it is done within the*

industry.'" *Sierra Club v. Morgan*, No. 07-C-251-S, 2007 WL 3287850, at *11-12 (W.D. Wis. Nov. 7, 2007) (quoting *Cinergy*, 495 F. Supp. 2d at 930-31) (emphasis added). Significantly, even a post-*Ohio Edison* case from the Southern District of Ohio, while following *Ohio Edison's* adoption of the "routine at the unit" standard, still recognized that "industry practices necessarily inform[] that inquiry." *New York v. Am. Elec. Power Serv. Corp.*, No. 2:04-cv-1098, 2:05-cv-360, 2007 WL 539536, at *2 (S.D. Ohio Feb. 15, 2007).

Unlike the *Duke* cases, none of the "routine at the unit" cases address EPA's history of inconsistency on the RMRR issue. *See Alabama Power I*, 372 F. Supp. 2d at 1305 ("Lacking in the *Ohio Edison* and [*SIGEGO*] opinions are the reasons the EPA's post-*WEPCo* statements and actions (inaction may be a better choice of words) count for so little. Put another way, if there is a countervailing case to be made to the *Duke* analysis, the court could not find it in *Ohio Edison* or [*SIGECO*]."). The cases adopting the "routine in the industry" standard, by contrast, have carefully studied the EPA's history on the issue in reaching a conclusion on the proper RMRR standard. *See, e.g., Duke I*, 278 F. Supp. 2d at 634-37. Moreover, as noted above, "despite according deference to the EPA's narrow interpretation of RMRR, several Courts in [the 'routine at the unit'] camp have ruled that one factor in the analysis — the 'frequency' factor — should be addressed with reference to projects that are performed *both* in the industry and at a particular unit." *Allegheny*, 2008 WL 4960100, at *5 (citing *Cinergy*, 495 F. Supp. 2d at 930-31; *SIGECO*, 245 F. Supp. 2d at 1016; and *Ohio Edison*, 276 F. Supp. 2d at 887) (emphasis in original).

In the end, the majority of courts addressing the RMRR standard, including *all* of the most recent ones, have adopted the "routine in the industry" standard as the proper standard for determining "routine" under the RMRR exclusion. Those courts have rejected the notion that routine must be judged *solely* by looking at the unit in question. This Court should adopt the

"routine in the industry" standard as well.[16]

II. EPA May Not Modify The RMRR Standard Through Litigation

Settled principles of administrative law also compel the conclusion that the "routine in the industry" standard is proper here. EPA cannot change its long-standing interpretation of the RMRR provision by litigation fiat.[17] Through its position taken in *WEPCo*, its statements in the *Federal Register*, its statements to the regulated community and to Congress, and its conduct for at least two decades, EPA established an interpretation of RMRR.[18] EPA now seeks to apply a different standard, which focuses on the particular unit at issue, without following the necessary process to change its interpretation.

"Once an agency gives its regulation an interpretation, it can only change that interpretation as it would formally modify the regulation itself: through the process of notice and comment rulemaking." *Alaska Prof'l Hunters*, 177 F.3d at 1033-34 (quoting *Paralyzed Veterans of Am. v. D.C. Arena*, 117 F.3d 579, 586 (D.C. Cir. 1997)); *accord Shell Offshore*, 238 F.3d at 629. *See also Duke I*, 278 F. Supp. 2d at 637. Even if a new interpretation does "not directly and expressly contradict the regulation itself," it is still impermissible if "it contradicts [the

---

[16] EPA has in recent cases attempted to rely on *New York v. EPA*, 443 F.3d 880 (D.C. Cir. 2006) *("New York II")* to impose a *de minimis* interpretation of RMRR. But *New York II* did not address the rules applicable to this case. Instead, it addressed only whether a revised provision that would have excluded projects costing up to 20% of the replacement cost of an entirely new unit was lawful, and struck it down. It is telling that the majority of decisions that have rejected EPA's "routine at the unit" re-interpretation were decided *after New York II.* Indeed, EPA unsuccessfully moved to vacate, in light of *New York II*, the two leading decisions on this point. *Duke*, 2010 WL 3023517, at *8; *Alabama Power I*, 681 F.Supp.2d at 1308-12.

[17] There can be no doubt that EPA's interpretation is a litigation change because EPA itself has said so in documents filed in this case. In its 2004 review of Michigan's NSR program, EPA acknowledged that Michigan followed the routine in the industry standard, which "is not consistent with USEPA policy (*recently expressed in utility enforcement initiative*)." United States Reply Mem. in Supp. of Mot. for Prelim. Inj., Exhibit 13B at 18, 20 (emphasis added).

[18] *See Duke I*, 278 F. Supp. 2d at 637 (quoting *Shell Offshore Inc. v. Babbitt*, 238 F.3d 622, 629 (5th Cir. 2001) ("existing practice" evidence of current interpretation of rule); *see also Alaska Prof'l Hunters Ass'n v. FAA*, 177 F.3d 1030, 1035 (D.C. Cir. 1999); *U.S. v. Am. Nat'l Can Co.*, 126 F. Supp. 2d 521, 528 (N.D. Ill. 2000) ("lack of enforcement speaks volumes.")

agency's] prior consistent interpretation of the regulation." *Shell Offshore*, 238 F.3d at 629. Otherwise, the agency would be able to evade the notice-and-comment requirements — which are bedrock requirements of administrative law (*see* 42 U.S.C. § 7607(d); Administrative Procedures Act (APA), 5 U.S.C. § 553) — by "in effect amend[ing] its rule" through the guise of a change in interpretation. *Id.; accord Syncor Int'l Corp.v. Shalala*, 127 F.3d 90, 94-95 (D.C. Cir. 1997) ("Otherwise, the agency could evade its notice and comment obligation by 'modifying' a substantive rule that was promulgated by notice and comment rulemaking.").

The Sixth Circuit has explained how an agency is constrained by the APA's notice and comment procedures when changing an interpretation of its regulations. *See Dismas Charities, Inc. v. U.S. DOJ*, 401 F.3d 666, 682 (6th Cir. 2005) ("It is true that once an agency gives a *regulation* an interpretation, notice and comment will often be required before the interpretation of that regulation can be changed")(emphasis in original). There can be no doubt that EPA is trying to change its longstanding, published interpretation of the RMRR regulation in its enforcement initiative. Thus, notice and comment is required. [19]

Here, like the majority of courts addressing the RMRR issue, the Court should hold that the established interpretation of RMRR — applying a "routine in the industry" standard — is applicable. Even if EPA could, in notice-and-comment rulemaking, adopt a different interpretation of the RMRR standards, it cannot apply such a new interpretation to Detroit

[19] In a recent filing in another district court, EPA itself acknowledged the requirement for public notice and comment when it decides to change its interpretation of a regulation. *See* Declaration of Regina McCarthy filed Jan. 31, 2011 in *Avenal Power Ctr. LLC v. EPA*, No. 1:10-cv-00383, at 18, 20 (D. D.C.) ("Because this change in position requires that EPA modify or narrow previous interpretations of EPA regulations and the positions EPA has taken in public statements to this court regarding this permit, the Agency reads applicable regulations and case law to require the EPA to provide the public with an opportunity to comment on this proposed action before the Agency can issue a final decision...."). (Ex. 13).

Edison in this litigation, precisely because it did not undertake such a rulemaking process. As one court stated:

> EPA cannot enforce unforeseen interpretations of the [regulations] simply by invoking the spirit of the CAA, and is particularly forbidden from doing so for the first time in the course of a litigation. The regulated public must be informed in advance of the rules of the game. Indeed, with respect to agency action, the regulated public also must have an opportunity to participate in setting those rules. That is the essence of notice and comment rulemaking. The EPA cannot escape the strictures of the notice-and-comment rulemaking process by cloaking a substantive [change to the regulations] in the guise of a mere interpretation of an extant regulation.

Am. Nat'l Can, 126 F. Supp. 2d at 530 (citations and footnote omitted). That is exactly what EPA has been attempting to do in its enforcement initiative, and this Court should not allow it.

CONCLUSION

For the foregoing reasons, Detroit Edison's motion should be granted, and the Court should enter an Order finding that the correct legal standard for evaluating RMRR is the "routine in the industry" standard.

/s/ F. William Brownell
F. William Brownell
brownell@hunton.com
Mark B. Bierbower
mbierbower@hunton.com
Makram B. Jaber
mjaber@hunton.com
Hunton & Williams LLP
2200 Pennsylvania Avenue, NW
Washington, D.C. 20037
(202) 955-1500

Harry M. Johnson, III
pjohnson@hunton.com
Hunton & Williams
951 E. Byrd Street
Richmond, Virginia 23219
(804) 788-8784

Counsel for Defendants

Matthew J. Lund (P48632)
PEPPER HAMILTON LLP
100 Renaissance Center, 36th Floor
Detroit, Michigan 48243
lundm@pepperlaw.com
(313) 393-7370

Michael J. Solo (P57092)
DTE ENERGY
One Energy Plaza
Detroit, Michigan 48226
solom@dteenergy.com
(313) 235-9512

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing **DEFENDANTS' MOTION TO ESTABLISH CORRECT STANDARD ON ISSUE OF RMRR** was electronically filed with the Clerk of Court using the CM/ECF system, which will automatically send email notification of such filing to the following attorneys of record as follows:

Ellen E. Christensen
U.S. Attorney's Office
211 W. Fort Street
Suite 2001
Detroit, MI 48226
313-226-9100
Email: ellen.christensen@usdoj.gov

James A. Lofton
Thomas Benson
Justin A. Savage
Kristin M. Furrie
U.S. Department of Justice
Environmental and Natural Resource Div.
Ben Franklin Station
P.O. Box 7611
Washington, DC 20044
202-514-5261
Email: thomas.benson@usdoj.gov
justin.savage@usdoj.gov
kristin.furrie@usdoj.gov
jim.lofton@usdoj.gov

Holly Bressett
Sierra Club Environmental Law Program
85 Second St., 2nd Floor
San Francisco, CA 94105
Phone: (415) 977-5646
Email: Holly.Bressett@sierraclub.org

Andrea S. Issod
Sierra Club
85 2nd Street, 2nd Floor
San Francisco, CA 94105
415-977-5544
Email: andrea.issod@sierraclub.org

This 18th day of July, 2011.

/s/ F. William Brownell

UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF MICHIGAN

UNITED STATES OF AMERICA,

Plaintiff,

And

NATURAL RESOURCES DEFENSE COUNCIL, INC. AND SIERRA CLUB,

Intervenor-Plaintiffs,

v.

DTE ENERGY COMPANY AND DETROIT EDISON COMPANY,

Defendants.

Civil Action No.
2:10-cv-13101-BAF-RSW

Judge Bernard A. Friedman

Magistrate Judge R. Steven Whalen

DEFENDANTS' MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

APPENDIX A:
INDEX OF EXHIBITS

Ex. 1	S. REP. NO. 91-1196 (1970) (excerpt)
Ex. 2	40 C.F.R. § 60.14(e)(1) (1976)
Ex. 3	WEPCo NSR Applicability Determination, Memorandum from D. Clay to D. Kee (Sept. 9, 1988)
Ex. 4	Final WEPCo Determination, Letter from L. Thomas to J. Boston (Oct. 14, 1988)
Ex. 5	Revised WEPCo Determination, Letter from D. Clay to J. Boston (Feb. 15, 1989)

Ex. 6	U.S. GEN. ACCOUNTING OFFICE, GAO/RCED-90-200, ELECTRICITY SUPPLY; OLDER PLANTS' IMPACT ON RELIABILITY AND AIR QUALITY (Sept. 1990) (excerpt)
Ex. 7	Memorandum from S. Tiber to N. Kete (Apr. 10, 1990) with attached GAO Fact Sheet, "Utility Decisionmaking for Aging Powerplants"
Ex. 8	Letter from J. Dingell to J. Watkins (Oct. 9, 1990)
Ex. 9	Letter from W. Rosenberg to J. Dingell (June 19, 1991)
Ex. 10	EPA, "Response to Issues Raised by Industry on Clean Air Act Implementation Reform," (May 30, 1995), *attached to* Letter from M. Nichols to W. Lewis (May 31, 1995) (excerpt)
Ex. 11	DOJ Press Release, "U.S. Sues Electric Utilities in Unprecedented Action to Enforce the Clean Air Act" (Nov. 3, 1999)
Ex. 12	Order Vacating in Part Memorandum on Correct Legal Tests, *United States v. Alabama Power Co.*, No. 2:01-cv-00152-VEH (N.D. Ala. Feb. 25, 2008)
Ex. 13	Declaration of Regina McCarthy, EPA, filed in *Avenal Power Ctr., LLC v. U.S. Envtl. Protection Agency*, No. 1:10-cv-00383-RJL (D.D.C. Jan. 31, 2011)

EXHIBIT 1
TO DEFENDANTS' MEMORANDUM OF LAW IN SUPPORT OF MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

Calendar No. 1214

91ST CONGRESS } SENATE { REPORT
2d Session } { No. 91-1196

NATIONAL AIR QUALITY STANDARDS ACT OF 1970

REPORT

OF THE

COMMITTEE ON PUBLIC WORKS
UNITED STATES SENATE

TOGETHER WITH

INDIVIDUAL VIEWS

TO ACCOMPANY

S. 4358

SEPTEMBER 17, 1970.—Ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE
50-311 O WASHINGTON : 1970

CONTENTS

Calendar No. 1214

91st Congress, 2d Session } SENATE { Report No. 91-1196

NATIONAL AIR QUALITY STANDARDS ACT OF 1970

SEPTEMBER 17, 1970.—Ordered to be printed

Mr. BYRD of West Virginia (for Mr. MUSKIE, from the Committee on Public Works, submitted the following

REPORT

together with

INDIVIDUAL VIEWS

[To accompany S. 4358]

The Committee on Public Works, to which the bill (S. 4358), to amend the Clean Air Act as amended, was referred having considered the same, reports favorably thereon without amendment. An original bill (S. 4358) is reported in lieu of S. 3229, S. 3466, and S. 3546 which were considered by the Committee.

GENERAL STATEMENT

The committee bill would restructure the methods available to attack a critical and growing national problem of air pollution.

The legislation reported by the committee is the result of deep concern for protection of the health of the American people. Air pollution is not only an aesthetic nuisance. The Committee's concern with direct adverse effects upon public health has increased since the publication of air quality criteria documents for five major pollutants (oxides of sulfur, particulates, carbon monoxide, hydrocarbons and oxidants). These documents indicate that the air pollution problem is more severe, more pervasive, and growing at a more rapid rate than was generally believed.

The new information that carbon monoxide concentrations at levels damaging to public health occur in Chicago more than 22 percent of the time, and that other cities have similar problems with carbon monoxide and other pollutants, intensified the committee's concern to authorize a massive attack on air pollution. This bill is designed to provide the basis for such an attack.

before the deadline—to file a petition against the United States in the District Court of the United States for the district where such region or portion thereof is located for relief from the effect of such expiration.

The Committee proposes to have such actions brought before the District Court constituted as a three-judge court with such actions taking precedence on the docket over all other causes and directing that they be expedited in every way.

The Committee expects that an extension of time would be granted only as a last alternative. Therefore, the bill would provide that the court could grant relief in the paramount interest of the United States and in the public interest and general welfare of the persons in such region only after finding that substantial efforts had been made to protect the health of persons in such regions, and that means to control emissions causing or contributing to the failure had not been available for sufficient time or that the failure was a result of a Federal facility operating under an exemption granted by the President. The bill would restrict relief to one-year extensions of the deadline. Nothing in this subsection should affect any provision or obligation pursuant to any implementation plan which is not the subject of the request for extension. The Secretary would be required to make changes in the implementation plan to bring the region into compliance with the applicable standard or standards within the year extension granted by the court.

The severe time limitations in the bill for filing an implementation plan for ambient air quality standards may limit the capacity of States to act simultaneously on plans for national ambient air quality goals. The bill would provide that the Secretary may extend for 18 months the period for submission of any portion of any implementation plan. The development of the portion of the implementation plan for the achievement of air quality goal requires different and more extensive analysis than that required to establish an implementation plan to achieve national ambient air quality standards. Therefore, the Committee bill would provide an additional period for such development for those regions where it is needed.

SECTION 112. STATE STANDARDS AND PLANS TO ACHIEVE GREATER AIR QUALITY CONTROL

Section 112 would restate the intent of Section 109 of the Air Quality Act of 1967 which provided assurance that States, localities, intermunicipal and interstate agencies may adopt standards and plans to achieve a higher level of ambient air quality than approved by the Secretary. The section would be revised to provide that such States, localities, intermunicipal and interstate agencies may adopt such more restrictive standards and plans and may establish timetables which achieve standards in a shorter period of time than required by Section 111 of this Act. The authority preserved by this section would apply to all aspects of the legislation except where the Congress has specifically pre-empted authority to act.

SECTION 113. NEW SOURCE PERFORMANCE STANDARDS

The provisions for new source performance standards are designed to insure that new stationary sources are designed, built, equipped, operated, and maintained so as to reduce emissions to a minimum.

The performance standards should be met through application of the latest available emission control technology or through other means of preventing or controlling air pollution. The maximum use of available means of preventing and controlling air pollution is essential to the elimination of new pollution problems while cleaning up existing sources.

As used in this section, the term "available control technology" is intended to mean that the Secretary should examine the degree of emission control that has been or can be achieved through the application or technology which is available or normally can be made available. This does not mean that the technology must be in actual, routine use somewhere. It does mean that the technology must be available at a cost and at a time which the Secretary determines to be reasonable. The implicit consideration of economic factors in determining whether technology is "available" should not affect the usefulness of this section. The overriding purpose of this section would be to prevent new air pollution problems, and toward that end, maximum feasible control of new sources at the time of their construction is seen by the committee as the most effective and, in the long run, the least expensive approach.

Major new facilities such as electric generating plants, kraft pulp mills, petroleum refineries, steel mills, primary smelting plants, and various other commercial and industrial operations must be controlled to the maximum practicable degree regardless of their location and industrial operations. It should be emphasized, however, that these examples are not intended to limit the Secretary's latitude in prescribing new source standards performance. While the examples cited are relevant examples of sources which would be subject to this provision, the Secretary would be expected to test and prescribe standards for any other categories of major stationary sources from which emissions would cause or contribute to endangerment of public health and welfare. New stationary sources which the administration has advised the committee to expect would be subject to the provisions of this section include:

Cement manufacturing;
Coal cleaning operations;
Coke byproduct manufacturing;
Cotton ginning;
Ferroalloy plants;
Grain milling and handling operations;
Gray iron foundries;
Iron and steel operations;
Nitric acid manufacturing;
Nonferrous metallurgical operations (e.g. aluminum reduction, copper, lead, and zinc smelting);
Petroleum refining;
Phosphate manufacturing;
Phosphoric acid manufacturing;
Pulp and paper mill operations;
Rendering plants (animal matter);
Sulfuric acid manufacturing;
Soap and detergent manufacturing;
Municipal incinerators; and
Steam electric powerplants.

The Secretary has authority to add to this list if he finds that other new sources fall within the requirement of this section.

"Standards of performance", a term which has not previously appeared in the Clean Air Act, refers to the degree of emission control which can be achieved through process changes, operation changes, direct emission control, or other methods. The Secretary should not make a technical judgment as to how the standard should be implemented. He should determine the achieveable limits and let the owner or operator determine the most economic, acceptable technique to apply.

The bill contains provisions for certification of compliance with new-source performance standards. It should be emphasized that the bill would provide for certification at the time a new facility begins operation, not prior to operation. The complexities of predicting emissions performance on the basis of blueprints and specifications make it undesirable to provide for preconstruction certification. However, preconstruction review of proposed plans for new facilities is desirable, since it would enable the Secretary (or States, where certification authority is delegated) to render advice and assistance to affected parties without making a commitment to grant certification. More importantly, standards of performance imply a result, not a technical judgment. Therefore, preconstruction certification would be inconsistent with this approach.

Industrial firms would be required to increase efforts to insure that new plants and equipment perform in accordance with the promises and commitments made by plant designers and equipment builders. New-source standards would thus provide maximum incentives to expand technology to insure adequate margins of safety.

The committee recognizes that the construction of major new industrial facilities in some regions may conflict with implementation plans for national air quality standards and goals—even where such new facilities are designed, equipped, and operated so as to comply with applicable Federal standards of performance. This is most likely to occur in places where existing levels of air pollution are excessive. Accordingly, the bill would provide that new-source certification procedures must include preconstruction review of the location as well as the design of affected new facilities so that certified new sources would not hinder the implementation of air quality standards and goals.

Standards of performance should provide an incentive for industries to work toward constant improvement in techniques for preventing and controlling emissions from stationary sources, since more effective emission control will provide greater latitude in the selection of sites for new facilities. Therefore, it should be clear that standards of performance are not static. The Secretary would be directed to review and promulgate new or modified standards whenever new technology processes or operating methods become available. When sufficient staff and funds are available, the review and modification should take place as frequently as possible to avoid having new plants comply with outdated standards.

New stationary sources subject to standards of performance established under this Act would be expected to be in compliance with those standards throughout their operational life. If greater control of stationary source emissions is necessary at any time to insure compli-

ance with air quality standards in a particular air quality control region, the bill would require that new requirements be imposed by a State or locality on any sources in that region, including those sources already built and operated in compliance with the Federal standards of performance. In such instances, however, it is expected that States would allow a reasonable time for improvements to be made.

Finally, it should be noted that the bill would require the Secretary to delegate the certification function to any State which adopts a certification procedure which the Secretary finds meets the requirements set forth in this Section. It is expected that every effort will be made to have States assume this responsibility.

Some States, however, may have to adopt new legislation to meet the requirements of section 113(d)(1). The Committee sees no reason why the Secretary should not permit a State to perform as much of the work involved in certification as it can under its existing State law until such time as the State has adopted the necessary enabling legislation. It should be clear that when certification authority is delegated, the Secretary would retain unrestricted enforcement authority. However, it is expected that the Secretary would take enforcement action only where a State does not meet its obligations.

SECTION 114. EMISSION STANDARDS FOR SELECTED AGENTS

Knowledge and experience gained under the Air Quality Act of 1967, particularly through the development of criteria documents, has revealed that pollution agents and combinations of such agents fall into three general categories. The first of these categories are those pollution agents which are emitted from diverse stationary and moving sources into the ambient air and which are generally detectable through monitoring devices and systems. These pollution agents are those for which the criteria documents are to be issued and for which national ambient air quality standards and implementation plans are to be established.

The second category of air pollution agents includes those which are hazardous to the health of persons as defined in section 115.

The third category of pollution agents includes those agents which are not emitted in such quantities or are not of such a character as to be widely present or readily detectable on a continuous basis with available technology in the ambient air. The presence of these agents is generally confined, at least for detection purposes, to the area of the emission source. The information available at this time indicates that the following list of substances are most likely to be considered as the agents to be covered under this section:

> Arsenic, chlorine gas, hydrogen chloride, copper, manganese, nickel, vanadium, zinc, barium, boron, chromium, selenium, pesticides, radioactive substances.

The bill would limit the imposition of emission standards for these selected air pollution agents to those categories of stationary sources which are subject to standards of performance under section 113. Available information indicates that these pollution agents are generally emitted from the stationary sources that would be subject to performance standards.

The Committee recognizes that the timing of the control of such pollution agents should be left to the discretion of the Secretary. It is

EXHIBIT 2
TO DEFENDANTS' MEMORANDUM OF LAW IN SUPPORT OF MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

40

Protection of Environment

PARTS 60 TO 99

Revised as of July 1, 1976

CONTAINING
A CODIFICATION OF DOCUMENTS
OF GENERAL APPLICABILITY
AND FUTURE EFFECT

AS OF JULY 1, 1976

With Ancillaries

Published by
the Office of the Federal Register
National Archives and Records Service
General Services Administration

as a Special Edition of
the Federal Register

(1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this part would not provide accurate measurements due to liquid water or other interferences caused by substances with the effluent gases.

(2) Alternative monitoring requirements when the affected facility is infrequently operated.

(3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.

(4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

(5) Alternative methods of converting pollutant concentration measurements to units of the standards.

(6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.

(7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.

(8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, Appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Administrator may require that such demonstration be performed for each affected facility.

(9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities are released to the atmosphere through more than one point.

[40 FR 46255, Oct. 6, 1975; 40 FR 59205, Dec. 22, 1975]

§ 60.14 Modification.

(a) Except as provided under paragraphs (d), (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

(b) Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors," EPA Publication No. AP–42, or other emission factors determined by the Administrator to be superior to AP–42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in paragraph (b)(1) of this section does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in paragraph (b)(1) of this section. When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in Appendix C of this part shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.

(d) A modification shall not be deemed to occur if an existing facility undergoes

a physical or operational change where the owner or operator demonstrates to the Administrator's satisfaction (by any of the procedures prescribed under paragraph (b) of this section) that the total emission rate of any pollutant has not increased from all facilities within the stationary source to which appropriate reference, equivalent, or alternative methods, as defined in § 60.2 (s), (t) and (u), can be applied. An owner or operator may completely and permanently close any facility within a stationary source to prevent an increase in the total emission rate regardless of whether such reference, equivalent or alternative method can be applied, if the decrease in emission rate from such closure can be adequately determined by any of the procedures prescribed under paragraph (b) of this section. The owner or operator of the source shall have the burden of demonstrating compliance with this section.

(1) Such demonstration shall be in writing and shall include: (i) The name and address of the owner or operator.

(ii) The location of the stationary source.

(iii) A complete description of the existing facility undergoing the physical or operational change resulting in an increase in emission rate, any applicable control system, and the physical or operational change to such facility.

(iv) The emission rates into the atmosphere from the existing facility of each pollutant to which a standard applies determined before and after the physical or operational change takes place, to the extent such information is known or can be predicted.

(v) A complete description of each facility and the control systems, if any, for those facilities within the stationary source where the emission rate of each pollutant in question will be decreased to compensate for the increase in emission rate from the existing facility undergoing the physical or operational change.

(vi) The emission rates into the atmosphere of the pollutants in question from each facility described under paragraph (d)(1)(v) of this section both before and after the improvement or installation of any applicable control system or any physical or operational changes to such facilities to reduce emission rate.

(vii) A complete description of the procedures and methods used to determine the emission rates.

(2) Compliance with paragraph (d) of this section may be demonstrated by the methods listed in paragraph (b) of this section, where appropriate. Decreases in emissions resulting from requirements of a State implementation plan approved or promulgated under Part 52 of this chapter will not be acceptable. The required reduction in emission rate may be accomplished through the installation or improvement of a control system or through physical or operational changes to facilities including reducing the production of a facility or closing a facility.

(3) Emission rates established for the existing facility which is undergoing a physical or operational change resulting in an increase in the emission rate, and established for the facilities described under paragraph (d)(1)(v) of this section shall become the baseline for determining whether such facilities undergo a modification or are in compliance with standards.

(4) Any emission rate in excess of that rate established under paragraph (d)(3) of this section shall be a violation of these regulations except as otherwise provided in paragraph (e) of this section. However, any owner or operator electing to demonstrate compliance under this paragraph (d) must apply to the Administrator to obtain the use of any exemptions under paragraphs (e)(2), (e)(3), and (e)(4) of this section. The Administrator will grant such exemption only if, in his judgment, the compliance originally demonstrated under this paragraph will not be circumvented or nullified by the utilization of the exemption.

(5) The Administrator may require the use of continuous monitoring devices and compliance with necessary reporting procedures for each facility described in paragraph (d)(1)(iii) and (d)(1)(v) of this section.

(e) The following shall not, by themselves, be considered modifications under this part:

(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of paragraph (c) of this section and § 60.15.

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on the stationary source containing that facility.

(3) An increase in the hours of operation.

(4) Use of an alternative fuel or raw material if, prior to the dato any standard under this part becomes applicable to that source type, as provided by § 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 119(d)(5) of the Act, shall not be considered a modification.

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.

(6) The relocation or change in ownership of an existing facility.

(f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.

(g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraphs (a) or (d) of this section, compliance with all applicable standards must be achieved.

[40 FR 58419, Dec. 16, 1975]

§ 60.15 Reconstruction.

(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.

(b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and

(2) It is technologically and economically feasible to meet the applicable standards set forth in this part.

(c) "Fixed capital cost" means the capital needed to provide all the depreciable components.

(d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:

(1) Name and address of the owner or operator.

(2) The location of the existing facility.

(3) A brief description of the existing facility and the components which are to be replaced.

(4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.

(5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.

(6) The estimated life of the existing facility after the replacements.

(7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

(e) The Administrator will determine, within 30 days of the receipt of the notice required by paragraph (d) of this section and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.

(f) The Administrator's determination under paragraph (e) shall be based on:

(1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;

(2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;

(3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and

(4) Any economic or technical limitations on compliance with applicable

EXHIBIT 3
TO DEFENDANTS' MEMORANDUM OF LAW IN SUPPORT OF MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 9 1988

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Applicability of Prevention of Significant Deterioration (PSD) and New Source Performance Standards (NSPS) Requirements to the Wisconsin Electric Power Company (WEPCO) Port Washington Life Extension Project

FROM: Don R. Clay, Acting Assistant Administrator for Air and Radiation (ANR-443)

TO: David A. Kee, Director
Air and Radiation Division, Region V

This is in further response to your March 25, 1988 memorandum requesting guidance on PSD applicability regarding the proposed renovation of the Port Washington Power Plant by the WEPCO. I have also addressed the question whether the renovations proposed for this facility would subject the individual units to Subpart Da of the NSPS.

Based on the information presented in your memorandum, subsequent written information received from WEPCO, information provided by the State of Wisconsin, and other information contained in the Environmental Protection Agency's (EPA's) files on this matter, I have concluded that, as proposed, this renovation project would not come within the PSD and NSPS exclusions for routine maintenance, repair, and replacement, nor the exclusions for increases in production rate or hours of operation. It also appears that the project would increase emissions within the meaning of these two programs. Thus, the renovation project likely would be subject to PSD review as a major modification of an existing stationary source and that the renovations proposed for units 1-5 at this facility probably would subject the individual units to Subpart Da of the NSPS as a modification. However, WEPCO has not yet requested EPA to make an applicability determination. In any case, it would not be possible to make final applicability determinations at this point, for three basic reasons.

First, EPA must be supplied sufficient data regarding the various pollutants emitted by the Port Washington facilities to determine, on a pollutant-specific basis, how the proposed renovations would affect emissions levels. Second, WEPCO might avoid both PSD and NSPS applicability by adding or enhancing pollution control equipment, or in the case of PSD, restricting

operations below maximum potential such that the emissions increases necessary to trigger applicability would not occur. The WEPCO should discuss its plans in this regard with EPA. Third, regarding NSPS applicability to unit 1, additional information is necessary to determine whether a physical or operational change would occur.

Thus, although this memorandum will serve to answer many of the questions necessary to reaching final determinations, you should advise WEPCO that ultimately applicability depends upon changes in emissions after the renovations and whether the company decides to take the steps which would enable it to lawfully avoid coverage. Also, NSPS coverage of unit 1 can only be determined after an evaluation of the additional information regarding the work to be performed. In addition, as to NSPS, WEPCO should be advised to submit a formal request pursuant to 40 CFR 60.5 if it desires a final applicability determination.

As the need for further factual development here suggests, determinations of PSD and NSPS applicability are fact-specific, and must be made on a case-by-case basis. This memorandum provides a framework for analyzing the proposed changes at Port Washington and gives EPA's views on relevant issues of legal interpretation. It should also be useful in assessing other so-called "life extension" projects in the future. However, any such project would need to be reviewed in light of all the facts and circumstances particular to it. Thus, a final decision regarding PSD and NSPS applicability here would not necessarily be determinative of coverage as to other life extension projects.

If you have any further questions regarding the discussion or conclusions in this memorandum, please have your staff contact David Solomon of the New Source Review Section at FTS 629-5375.

I. Background

As mentioned in your March 25 request, the five coal-fired units at Port Washington began operation in 1935, 1943, 1948, 1949, and 1950, respectively. Each unit was initially rated at 80 megawatts electrical output capacity. In recent years, however, the performance of the units began to deteriorate due to age-related degradation of the physical plant. In particular, inspections performed by a WEPCO consultant in 1984 revealed extensive cracks originating from the internal surfaces of the rear steam drums and boiler bank boreholes in units 2, 3, 4, and 5, creating significant safety concerns. Because of these safety concerns and other age-related problems, in 1985 the operating levels of units 2, 3, and 4 were reduced, and unit 5 was removed from service. As a result of the plant's deteriorating condition, the maximum rated physical capacities of units 1, 2, 3, and 4 at this time are 45, 65, 75, and 55 megawatts, respectively.

The life extension project includes extensive capital improvements to the common facilities and each of the individual units, including replacement of the rear steam drum in units 2, 3, 4, and 5. The renovation work will restore the physical and operational capability of each unit to its original 80 megawatt nameplate capacity, and extend the useful life of the units well beyond the planned retirement dates that would otherwise apply. Upon completion of the project, WEPCO intends to substantially increase the actual operations at the Port Washington plant.

II. PSD Applicability

The life extension project at Port Washington is subject to preconstruction review and permitting under the Act's PSD provisions if it is a "major modification" within the meaning of the Act and EPA's regulations. The PSD regulations at 40 CFR 52.21 govern this determination because Wisconsin has been delegated PSD permitting authority under the provisions of 52.21(u). The definition of "major modification" in 52.21(b)(2)(i) requires an analysis of several factors. These factors may be grouped under two general questions. Will the work entail a "physical change in or change in the method of operation of a major stationary source"? If so, will the change "result in a significant net emissions increase of any pollutant subject to regulation under the Act" [see 52.21(b)(2)(i)]? The Port Washington facility is an existing major stationary source because it emits well in excess of the PSD threshold amount for several pollutants.

A. Physical Change or Change in the Method of Operation

This requirement of a major modification is satisfied if either a physical or operational change would occur.

1. Physical Change

The renovation work called for under the proposed life extension project at Port Washington would constitute a "physical change" at a major stationary source. The clear intent of the PSD regulations is to construe the term "physical change" very broadly, to cover virtually any significant alteration to an existing plant. This wide reach is demonstrated by the very narrow exclusion provided in the regulations: other than certain uses of alternate fuels not relevant here, only "routine maintenance, repair and replacement" is excluded from the definition of physical change [see 52.21(b)(2)(iii)(a)].

In determining whether proposed work at an existing facility is "routine," EPA makes a case-by-case determination by weighing the nature, extent, purpose, frequency, and cost of the work, as well as other relevant factors, to arrive at a common-sense finding. In this case, all of these factors suggest that the work required under WEPCO's life extension project appears not to be "routine." The available information indicates that the work proposed at Port Washington is far from being a regular, customary, or standard undertaking for the purpose

of maintaining the plant in its present condition. Rather, this is a highly unusual, if not unprecedented, and costly project. Its purpose is to completely rehabilitate aging power generating units whose capacity has significantly deteriorated over a period of years, thereby restoring their original capacity and substantially extending the period of their utilization as an alternative to retiring them as they approach the end of their useful physical and economic life. The most important factors that would support these conclusions are outlined below.

a. The project would involve the replacement of numerous major components. The information submitted by WEPCO shows that the company intends to replace several components that are essential to the operation of the Port Washington plant. In particular, as noted above, WEPCO would replace the rear steam drums on the boilers at units 2, 3, 4, and 5. According to WEPCO, these steam drums are a type of "header" for the collection and distribution of steam and/or water within the boilers. They measure 60 feet long, 50.5 inches in diameter, and 5.25 inches thick, and their replacement is necessary to continue operation of the units in a safe condition. In addition, at each of the emissions units, WEPCO plans to repair or replace several other integral components, including replacement of the air heaters at units 1, 2, 3, and 4. The WEPCO also plans to renovate major mechanical and electrical auxiliary systems and common plant support facilities. The WEPCO intends to perform the work over a 4-year period, utilizing successive 9-month outages at each unit.

In its July 8, 1987 application for authority to renovate to the Public Service Commission of Wisconsin (PSC), WEPCO described the life extension project and explained its purpose and necessity. The WEPCO took care to distinguish the proposed renovation work from routine maintenance that did not require PSC approval, explaining that:

> . . . [work items] falling into the category of repetitive maintenance that are normally performed during scheduled equipment outages do not require specific commission approval and, accordingly, are not included in this application.

Thus, WEPCO's own earlier characterization of this project supports a finding that the planned renovations are not routine.

b. The purpose of the project is to significantly enhance the present efficiency and capacity of the plant and substantially extend its useful economic life. In its application to the PSC, WEPCO pointed out that due to age-related deterioration, total plant capability had declined by 40 percent. The company noted that the currently planned retirement dates for the Port Washington units, as set forth in its Advance Plan filed with the State, ranged from 1992 to 1999. However, WEPCO asserted that "extensive renovation of the five units and the plant common facilities is needed if operation of the plant is to be continued." In any event, WEPCO stated that the renovation work would allow the Port Washington plant to generate power at its designed capacity until the year 2010, and thus "represents a life extension of the units."

In contrast, in its July 29, 1988 letter to EPA headquarters (pages 9-13) WEPCO characterized the renovation work as the timely, routine correction of equipment problems--principally, the steam drum cracks. However, the information presented leads to the conclusion that this is not the case. While replacement of the steam drums is necessary to restore lost generating capacity, that is not the only work proposed to be done. Based upon maximum capacity figures for past years, it appears that the units had experienced deterioration in physical generating capacity even prior to the discovery of the steam drum cracks in 1984. Thus, WEPCO proposes a wide-ranging project encompassing a broad array of tasks that would not only correct the steam drum problem, but correct other age-related deterioration that is essentially independent of the steam drums. Such other work (e.g., replacement of air handlers) apparently is also necessary as a practical matter to restore original nameplate capacity. Thus, it appears that even if WEPCO had undertaken this renovation work immediately following discovery of the steam drum cracks, it would have been proper to characterize the proposed work as a nonroutine life extension project.[1]

c. The work called for under the project is rarely, if ever, performed. The WEPCO's application to the PSC asserted that the work to be performed under the life extension project was not frequently done:

> Generally, the renovation work items included in this application are those that would normally occur only once or twice during a unit's expected life cycle.

The EPA asked WEPCO to submit information regarding the frequency of replacement of steam drums, the largest category of work item called for under the project. WEPCO reported that to date, no steam drums have ever been replaced at any of its coal-fired electrical generating facilities. WEPCO did point out that it had replaced other "headers" comparable in design pressure and function. However, the largest of these was 16 inches in

[1]It is important to note in this regard that not all renovation, repair, or "life extension" projects would properly be characterized as modifications potentially subject to PSD and NSPS. For example, nonroutine repairs to correct unexpected equipment outages, even of major components such as steam drums, would not be subject to NSPS if they did not increase the maximum capacity of the affected facility as it existed prior to the outage. Conversely, undertaking a program of repair and maintenance properly characterized as routine would not subject a facility to the Act's requirements.

diameter, and EPA does not believe that they are comparable in diameter, wall thickness, function, or importance to the rear steam drums at Port Wasnington.[2]

d. The work called for under the project is costly, both in relative and absolute terms. The latest information supplied by WEPCO is that the renovation work at Port Washington will cost $87.5 million, of which at least $45.6 million is designated as capital costs.[3] The WEPCO reports that, in terms of annualized costs, the renovation project will cost $7.8 million, as compared to $51.6 million for a new 400 megawatt plant. Thus, renovation costs represent approximately 15 percent of replacements costs.

2. Change in the Method of Operation

The renovation work at Port Washington would not constitute a "change in the method of operation" within the meaning of the PSD regulations. However, it is clear that the "physical change" and "operational change" components of the "major modification" definition are discrete and independent. Thus, as explained below, PSD still applies if there is a physical change that will significantly increase net emissions.

In addition, the regulations exclude from the definition of physical or operational change "an increase in the hours of operation or in the production rate" [see 40 CFR 52.21(b)(2)(iii)(f)]. The preamble to the rule [45 FR 52676, 52704 (August 7, 1980)], makes it clear that this exclusion is intended to allow a company to lawfully increase emissions through a simple change in hours or rate of operation up to its potential to emit (unless already subject

[2]The WEPCO's July 29, 1988 letter to EPA stated (on page 13) that after further investigation, the company "learned of several examples" of steam drum failure and replacement. However, WEPCO provides no further details, other than noting that in one instance, the drum failed during initial testing and was replaced. Replacement of a failed component at a new facility presumably would not increase emissions from the facility, and probably would be viewed as routine if the alternative was to forego operation of that new facility. Under such circumstances, it is unlikely that the replacement would trigger the Act's requirements.

[3]The WEPCO's July 8, 1987 application to the PSC included a project cost estimate of $83.9 million, of which $45.6 million was designated as capital costs. A more recent cost estimate provided to EPA by WEPCO indicates that several work items are now deemed unnecessary, such that the cost of the original project is now estimated at $70.5 million. However, all but $89,000 of these reductions are designated as "maintenance" items. The recent submission also relates that the scope of the original project has now been expanded to include flue gas conditioning equipment and associated air heater work costing approximately $17 million. Although WEPCO has not broken down these additional costs into capital and maintenance (or "expense") expenditures, it would appear that most, if not all, of this additional work would be classified as capital costs. Thus, it is highly likely that actual capital costs would be significantly higher than $45.6 million.

to any federally enforceable limit) without having to obtain a PSD permit. Thus, emissions increases at Port Washington associated with increased operations would not, standing alone, subject WEPCO to PSD requirements. However, as discussed in greater detail below, the exclusion for increases in hours of operation or production rate does not take the project beyond the reach of PSD coverage if those increases do not stand alone but rather are associated with non-excluded physical or operational changes.

In its March 17, 1988 letter to Region V and its July 29, 1988 letter to EPA Headquarters, WEPCO asserted that the exclusion for increases in operational hours or production rate also would serve to render PSD review not applicable to the renovation work proposed at Port Washington because the project's purpose was to restore the original design capacity of 80 megawatts per unit, but not to exceed that level. However, a plant's original design capacity is irrelevant to a determination of PSD applicability.

B. Significant Net Emissions Increase

Under the PSD regulations, whether the life extension project at Port Washington would result in a "significant net emissions increase" depends on a comparison between the "actual emissions" before and after the physical changes resulting from the renovation work. Where, as here, the source has not yet begun operations following the renovation, "actual emissions" following the renovation are deemed to be the source's "potential to emit" [see 40 CFR 52.21(b)(21)(iv)]. Apparently, there would be a "significant net emissions increase" within the meaning of the PSD regulations as a result of the proposed renovations as currently planned, because potential emissions after the project--reflecting the restoration of 80 megawatt capacity at each unit--would greatly exceed representative actual emissions prior to the physical changes. (The fact that the project is intended to restore the plant's original design capacity is irrelevant to that calculation.)[4] If this is so, the project would be a "major modification" subject to PSD review. However, PSD applies on a pollutant-specific basis, and EPA has not been furnished with adequate data regarding the impact of the proposed renovations on the various pollutants to determine whether a significant net emissions increase would indeed occur for any pollutant. Such data must be provided before EPA can make a final determination of PSD applicability.

[4]The WEPCO also contends (July 29, 1988 letter, page 35) that EPA should instead compare representative actual emissions prior to the change with "projected" actual emissions after the renovations. The PSD regulations provide no support for this view. Where, as here, a source is not currently subject to a PSD permit containing operational limitations, EPA must presume that the source will operate at its maximum capacity and, hence, its maximum potential to emit. However, as discussed below, a source is entitled to reduce its potential to emit by embodying its "projections" of future emissions in federally enforceable restrictions on its operations that may serve to lawfully avoid PSD review.

It is important to note in this regard that WEPCO, at its option, could "net out" of PSD review by accepting federally enforceable restrictions on its potential to emit after the renovation. This could occur through enhancement of existing pollution control equipment, addition of new equipment, acceptance of federally enforceable operational restrictions, or some combination of these measures, limiting potential emissions to a level not significantly greater than representative actual emissions prior to the renovations. Theoretically, WEPCO could minimize the needed restrictions on its potential to emit following the renovations if it could show that some period other than the most recent two years is "more representative of normal source operation" [see 52.21(b)(21)(ii)]. (Obviously, such a showing would be most important with respect to unit 5, because it has been shut down and has had zero emissions since 1985.) Since these matters are within WEPCO's control, you should advise the company to enter discussions with Region V and Wisconsin, as appropriate, if WEPCO desires to "net out" of PSD review.

The WEPCO also argued in its July 29, 1988 letter, at payes 33-41, that even if EPA is correct that the Port Washington life extension project would involve physical changes within the meaning of the PSD regulations, any emissions increases would be due to increased production rates or hours of operation rather than higher emissions per unit of production. Therefore, WEPCO contends that these increases should be excluded from consideration in determining whether a net significant emissions increase and, hence, a major modification, would occur. The WEPCO is incorrect in this regard.

As noted above, the exclusions cited by WEPCO are intended to apply where a source increases emissions by simply combusting a larger amount of fuel, or processing a larger amount of raw materials during a given time period, or by expanding its hours of operation "to take advantage of favorable market conditions" (see 45 FR 52704). In this instance, however, it is obvious that WEPCO's plans to increase production rate or hours of operation are inextricably intertwined with the physical changes planned under the life extension project. Absent the extensive renovations proposed at Port Washington, WEPCO would have little market incentive to, and in part would be physically unable to, increase operations at these aged and deteriorated facilities which, absent the renovations, would likely be retired from service in the near future. Thus, WEPCO's plans call for precisely the type of "change in hours or rate or operation that would disturb a prior assessment of a source's environmental impact [and] should have to undergo [PSD review] scrutiny" (see 45 FR 52704). Conversely, accepting WEPCO's interpretation of the major modification regulations would serve to exclude from consideration all physical or operational changes except those which cause increased emissions per unit of production. Clearly, EPA never intended this result. It would allow, through substantial capital investment, significant expansion of the pollution-emitting capacity and longevity of major industrial facilities without PSD review of the impacts on air quality and opportunities for future economic growth.

C. Baseline Date

The November 9, 1987 letter from the Wisconsin Department of Natural Resources to Region V asked whether a complete March 28, 1986 PSD permit application for certain work at Port Washington triggered the PSD baseline date, despite the fact that the permit was never issued. The answer to this question is yes. Baseline dates are triggered by the first complete application and remain in effect regardless of whether the application is revised or withdrawn, or whether the permit is finally issued and the source constructed or modified.

III. NSPS Applicability

The Port Washington renovations are subject to the Act's NSPS if they constitute "modifications" within the meaning of section 111 and 40 CFR Part 60. Under 60.1, the NSPS applies to modifications at an "affected facility." Each unit at Port Washington is properly characterized as an "affected facility" subject to the NSPS at 40 CFR Part 60, Subpart Da, which applies to electric utility steam generating units [see 60.40(a)]. Pursuant to 60.14(a), a modification for NSPS purposes is defined as "any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies." Increase in emission rate is in turn defined as an increase in kilograms per hour (kg/hr) [see 60.14(b)].

Pursuant to longstanding EPA interpretations, the emission rate before and after a physical or operational change is evaluated at each unit by comparing the hourly potential emissions under current maximum capacity to emissions at maximum capacity after the change. In addition, under the Act's NSPS provisions, only physical limitations on maximum capacity are considered in determining potential emissions at power plants. Thus, any prospective changes in fuel or raw materials accompanying the physical or operational change are not considered in determining maximum capacity. Consequently, 60.14(b)(2) requires that, in conducting emissions tests before and after a change to determine whether an increase in emission rate has occurred, "operational parameters" which may affect emissions must be held constant. Fuel and raw materials are "operational parameters" for this purpose. Similarly, 60.14(e)(4) provides that use of an alternative fuel or raw material which the existing facility was designed to accommodate before the change would not be considered a modification. Thus, for example, a physical change which increases the maximum capacity of the facility would have a corresponding increase in the sulfur dioxide emissions if the facility used fuel with the same sulfur content before and after the change. Such a prospective increase cannot be offset by instead using fuel with a lower sulfur content after the change, because, under the regulations, the facility would always have the option of changing back to the higher sulfur-content fuel at a later date without triggering a modification for NSPS purposes. However, any offsetting reductions in emission rate caused by the concurrent addition of pollution control equipment would be considered in determining whether a physical or operational change results in an increase in emission rate.

The WEPCO contends (July 29, 1988 letter, at pages 20-27) that baseline capacity for the purpose of determining whether an increase in emission rate occurs for purposes of an NSPS modification is the original design capacity of the facility. This is incorrect. The thrust of the NSPS modification provisions is to compare actual maximum capacity before and after the change in question. Thus, original design capacity is irrelevant. The provision in 40 CFR 60.14(b)(2) for manual emission tests to determine whether an increase has occurred clearly contemplates that tests will be done just prior to and after the physical or operational change. The original design capacity of a unit, to the extent it differs from actual maximum capacity at the time of the test due to physical deterioration--and, hence, derating--of the facility, is immaterial to this calculation.

A. Physical or Operational Change

As with the Act's PSD provisions, a modification occurs for NSPS purposes, if there is either a physical or operational change [see 40 CFR 60.14(a)].

1. Physical Change

As is the case under the PSD provisions, the proposed renovations at Port Washington would constitute a physical change for NSPS purposes, at least at units 2, 3, 4, and 5. The WEPCO would need to supply more information, if EPA is to make a definitive determination as to unit 1.

The rear steam drums are part of the steam generating unit which constitutes the "affected facility" within the meaning of 40 CFR 60.41(a), and the drum replacements at units 2, 3, 4, and 5 are integral to the planned increase in maximum capacity, which is the purpose of the life extension project. With respect to unit 1, other physical changes would increase maximum capacity from 45 to 80 megawatts. However, there is some question whether those changes, in significant part, would occur at the steam generating unit or will be limited to the turbine/generator set, which is not part of the affected facility. We suggest that you pursue this matter with WEPCO to the extent necessary to determine NSPS applicability regarding unit 1.

As with PSD, the NSPS regulations exclude routine maintenance, repair, and replacement [see 60.14(e)(2)]. However, the renovations at the Port Washington steam generating units are not routine for NSPS purposes for the same reasons--detailed above--that they are not routine for PSD purposes.

2. Operational Change

Operational changes include both increases in hours of operation and increases in production rate. Section 60.14(e)(3) provides that an increase in hours of operation is not, by itself, a modification. However, an increase in production rate at an existing facility constitutes a modification, unless it can be accomplished without a capital expenditure on that facility [see 60.14(e)(2)].

It is highly likely that the life extension project at Port Washington constitutes an operational change under this standard, for two reasons. First, restoring nameplate capacity at units 1, 2, 3, and 4 presumably entails, among other things, changes that will allow the units to combust a larger amount of fuel at maximum capacity through operation at higher working pressures than the units have been able to accommodate in recent years. In the case of unit 5, the renovations presumably involve an increase over zero fuel and pressure. These changes constitute an increase in production rate within the meaning of the regulations. Second, as noted above in the discussion of PSD applicability, this increase in production rate entails substantial investments to improve the capital stock at each affected facility. It appears that these investments are large enough to qualify as "capital expenditures" under the formula specified in 60.2, although WEPCO should be asked to supply actual calculations should this become necessary to determine NSPS applicability.

B. Increase in Emission Rate

It seems clear that, absent some creditable offsetting changes, the increases in maximum generating capacity proposed for each of the Port Washington units would represent an increase in the hourly potential emission rate for each pollutant to which a standard applies over the emission rate prior to the renovation. As noted above, burning cleaner fuels would not be creditable. Similarly, voluntarily restricting the production rate following the renovations also would not be creditable for NSPS purposes, because WEPCO could, at a later date, increase production without triggering NSPS [see 40 CFR 60.14(e)(2)]. Accordingly, to avoid triggering NSPS, WEPCO would need to install additional air pollution control equipment, or upgrade existing equipment, to offset the potential emissions increases, such that no increase would occur at maximum capacity. The information submitted indicates that WEPCO may plan some enhancement of the current control equipment, but it is unclear whether this would be adequate to prevent an increase in emission rates. As with PSD applicability, such steps can lawfully avoid NSPS requirements. Accordingly, you should advise the company that it should address these contingencies if it desires EPA to rule on whether WEPCO can avoid NSPS requirements in this fashion.

C. Reconstruction

Based upon data provided by WEPCO, it seems that the Port Washington renovations would not qualify as a "reconstruction" for NSPS purposes under 40 CFR 60.15, because the capital cost for the upgrades to each of the five units, while substantial, apparently is less than 50 percent of the fixed capital cost of constructing a comparable, entirely new steam generating unit [see 60.15(b)(1)]. However, the modification and reconstruction provisions of NSPS are independent. The former provisions are intended to apply in circumstances where physical or operational changes which increase emissions make NSPS coverage appropriate at levels well below 50 percent of the capital cost of a replacement unit. Conversely, the reconstruction provisions are aimed at changes to an existing unit irrespective of associated emissions

increases, but trigger NSPS requirements only if the higher 50 percent level is reached. Thus, the suggestion made by WEPCO in its July 29, 1988 letter (at pages 14-15) that EPA must undertake rulemaking to amend the reconstruction regulations before NSPS could be applied to the Port Washington project is not well taken.

IV. Conclusion

In adopting the PSD and NSPS programs, Congress sought to focus air pollution control efforts at an efficient and logical point: the making of long-term decisions regarding the creation or renewal of major stationary sources. The Port Washington life extension project, as it has been presented to EPA, would involve a substantial financial investment at pollution-emitting facilities that may significantly increase potential emissions of air pollutants over a period well beyond the current life expectancy of those facilities. If the additional factual information called for in this memorandum shows that emissions increases would indeed result from this project, the project would be subject to PSD and NSPS requirements. Such a result would be in harmony with the broad policy objectives that Congress intended to achieve through these programs.

cc: Gerald Emison, OAQPS
Alan Eckert, OGC

EXHIBIT 4
TO DEFENDANTS' MEMORANDUM OF LAW IN SUPPORT OF MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D C 20460

OCT 14 1988

THE ADMINISTRATOR

Mr. John W. Boston
Vice President
Wisconsin Electric Power Company
Post Office Box 2046
Milwaukee, Wisconsin 52301

Dear Mr. Boston:

As you requested in our meeting on September 15, 1988, I have made final determinations regarding the applicability of the Clean Air Act's New Source Performance Standards (NSPS) and Prevention of Significant Deterioration (PSD) requirements to the proposed life extension project at the Port Washington steam electric generating station, which is owned and operated by Wisconsin Electric Power Company (WEPCO). For the reasons discussed below, I have determined that, as proposed, the renovations at Port Washington are subject to both PSD and NSPS requirements. However, EPA remains willing to work with you regarding methods of compliance. As we have discussed, one alternative would be to reconfigure the project such that no emissions increases would occur. My staff is ready to meet with you to discuss these matters at any time.

I. BACKGROUND

On September 12, 1988, David Kee, Director, Air and Radiation Division, EPA Region V, wrote you regarding PSD and NSPS coverage of the Port Washington renovations. Enclosed with that letter was a memorandum dated September 9, 1988 from Don R. Clay, Acting Assistant Administrator, addressing the background of the Port Washington project, and analyzing at some length the relevant interpretative issues. For purposes of brevity, I will not repeat that material here, but rather incorporate it by reference.

The September documents concluded that the life extension project, as proposed, likely would be subject to PSD and NSPS requirements. However, EPA also stated that final applicability determinations could not be provided at that time in the absence of certain factual information. In our subsequent meeting you requested that EPA furnish final determinations, and agreed to provide the necessary additional information. You also asked EPA to reconsider certain of the conclusions in Don Clay's memorandum. These matters are discussed below.

II. FINAL DETERMINATIONS

Your staff has responded to our requests for additional information, and I want to thank you for WEPCO's continued cooperation in doing so. Based on this, and the other information in EPA's files, I now make the following final determinations:

(1) The life extension project, as proposed, will render WEPCO's Port Washington plant subject to the PSD requirements of Part C of the Clean Air Act as a major modification within the meaning of the Act and the EPA regulations at 40 C.F.R. § 52.21.

(2) The proposed life extension project will render each of the five steam generating units at the Port Washington plant subject to the NSPS requirements of section 111 of the Clean Air Act as a modification within the meaning of the Act and the EPA regulations at 40 C.F.R. Part 60.

In reconsidering the memorandum and letter of September 9 and 12, I have taken a careful look at the issues you raised in our meeting: whether the renovations are routine; whether EPA has treated similar projects in a different fashion; and whether there would be an emissions increase due to a physical or operational change. However, I find no reason to depart from the reasoning of the September documents. Accordingly, I conclude that WEPCO's life extension project, if carried out as proposed, will involve a substantial and non-routine renewal of the Port Washington facilities that will significantly increase both hourly maximum and annual emissions of air pollutants.

Specifically, regarding the nature of the proposed work at Port Washington, I find that these renovations constitute physical changes for PSD purposes within the meaning of 40 C.F.R. § 52.21(b)(2)(i), and physical and operational changes for NSPS purposes within the meaning of 40 C.F.R. § 60.14(a). I find further that these changes do not come within the PSD and NSPS exclusions for routine maintenance, repair, and replacement, nor the exclusions for increases in production rate or hours of operation. (See 40 C.F.R. §§ 52.21(b)(2)(iii) and 60.14(e)).

Regarding the emissions changes from the life extension project, based upon the emissions data and certain factual assertions submitted by WEPCO, I find that the Port Washington renovations will result in a significant net increase in emissions of several pollutants for PSD purposes within the meaning of 40 C.F.R. § 52.21(b)(2)(i), (b)(3), and (b)(21). I find further that the renovations will result in an increase in the emission rate of several pollutants at each of units 1-5 for NSPS purposes within the meaning of 40 C.F.R. § 60.14(a) and (b).

Enclosures A and B detail the emissions changes underlying these findings for PSD and NSPS purposes. As indicated above, EPA's calculations and determinations are based on data supplied by WEPCO. We will use the data in Enclosures A and B in the event you would like to work with us to establish an acceptable arrangement for satisfying PSD and NSPS requirements through the addition or enhancement of pollution control equipment, physical capacity restrictions, or, in the case of PSD, federally enforceable limitations on potential emissions.

III. DISCUSSION

As you requested, I have reconsidered the question of whether the physical and operational changes at Port Washington are routine, whether applying PSD and NSPS here would be inequitable in light of EPA's past treatment of renovation projects, and whether the renovations will result in emissions increases. These matters are addressed below, as is EPA's reasoning with respect to the baselines for calculating the PSD and NSPS emissions increases reflected in Enclosures A and B.

Regarding the question of routineness, the renovations involve the replacement of steam drums, air heaters, and other major components that are integral to the continued operation of the source. The work will not simply maintain the facilities in their current state, but rather will significantly enhance their present efficiency and capacity, and substantially extend their useful economic life. In addition, the work called for here is rarely, if ever, performed. Moreover, this work is costly, both in relative and absolute terms. Based on these and other factors, I reaffirm Don Clay's findings on the non-routine character of the Port Washington changes. The September 9 memorandum contains a complete discussion of EPA's reasoning on this issue.

On the related equity question, I find no inconsistency here with EPA's prior determinations regarding routine and non-routine changes. I note initially that PSD and NSPS applicability determinations are made on a case-by-case basis. Thus, it is very difficult to analogize to other projects, which almost inevitably present significant factual differences. Nevertheless, my staff has reviewed the additional material you submitted on September 19, and September 27, 1988 regarding certain other renovation projects, and has informally surveyed EPA Regional Offices and state agencies.

I have concluded that none of the four steam drum replacements identified in your September 19 submission are sufficiently similar to the Port Washington project to support determinations of nonapplicability in this matter. The Carolina

Power and Light case involved a faulty steam drum replaced prior to the initial start-up of a new unit, and would not have increased emissions for PSD or NSPS purposes. The Great Western Sugar example did not involve a utility boiler, and was too small to be affected by NSPS. The Ashland Oil facility was not at a utility, involved a waste heat boiler that was not fossil-fuel fired, and hence, was not an emissions unit subject to PSD or NSPS. The Algoma Steel Co. facility was not a utility boiler, and not located in the United States.

In addition, the informal survey conducted by the Office of Air and Radiation disclosed no closely analogous cases that were ever reviewed by EPA headquarters for purposes of PSD or NSPS applicability. In particular, EPA found no examples of steam drum replacement at aged electric generating facilities. Moreover, EPA could find no examples in which the Agency had analyzed and issued an applicability determination for a "life extension project" for any category of major source. Regarding the four utility projects identified in your September 27 submission, I note that they do not involve steam drum replacement. In addition, permit applications were not submitted to the state agencies for the Duke Power and Texas Utilities projects you cite. Consequently, they were not reviewed by any air pollution control agency. The Cincinnati Gas and Electric project was reviewed by the state, but not EPA. The state determined, and EPA Region II concurred, that the Hydraco Enterprises project was not subject to PSD based on a net decrease in emissions of all pollutants. Our informal survey and review of the projects you identified reveal that major construction activities undertaken by utilities that may be subject to Clean Air Act requirements have not been brought to the attention of EPA. The Agency is considering what steps may be necessary to address this situation.

EPA has discovered only two state agency determinations addressing life extension questions in a manner possibly inconsistent with EPA's analysis of the Port Washington project. These instances, which apparently were not brought to EPA's attention prior to the states' determination, do not create an inequity that would justify a different conclusion by EPA in this case.

As to the question of emissions increases at Port Washington, I believe that EPA has properly interpreted the PSD and NSPS regulations as applying to increases in emissions due to increases in hours of operation or production rate, where, as here, such operational or production increases are closely related to physical or operational changes. A contrary interpretation would allow even massive emissions increases stemming from significant new capital investment -- as distinguished from routine fluctuations in the business cycle --

to escape scrutiny under the Clean Air Act simply because the new investment did not involve an inherently more polluting production process. I do not believe that Congress intended such a result.

I would like to point out that the figures on emissions increases in Enclosures A and B reflect my conclusions regarding the proper points in time from which to calculate emissions changes. For PSD, I have determined under 40 C.F.R. § 52.21(b)(21)(ii) that the two-year period of 1983 and 1984 -- prior to the source curtailments due to discovery of cracks in the rear steam drums -- are more representative of normal source operations than the most recent two-year period. This conclusion is appropriate in light of WEPCO's historical operations.

As to NSPS, there is no "representative emissions" concept under that program. Rather, under the circumstances presented by this case, the baseline emission rates for units 1-5 are determined by hourly maximum capacity just prior to the renovations. At this time, EPA is relying on the actual operating data you submitted to determine current maximum capacity. Although EPA is certainly open to further discussion on this point, the information contained in your September 27 and October 11, 1988 submissions is inadequate to support WEPCO's assertions that higher-than-actual capacities could be achieved on an economically sustainable basis. For example, you indicate that operation at higher levels at units 1-4 "could increase equipment deterioration thus causing further damage." Regarding Unit 5, you state that "safety concerns" dictated the decision to shut down that unit. Based on this information, we are unable to rely on WEPCO's statements as to maximum "achievable" capacity in determining the emissions changes at each of these units. Thus, for example, in the case of unit 5, the current capacity must be regarded as zero.

IV. CONCLUSION

In adopting the PSD and NSPS programs, Congress intended to address the type of long-term capital investments in pollution-emitting facilities at issue in the Port Washington life extension project. Thus, as proposed, these renovations would be subject to the requirements of both programs. However, as indicated above, my staff remains ready to work closely with WEPCO to discuss specific pollution control equipment and permitting measures that would minimize the cost to WEPCO of complying with the requirements of the Clean Air Act. I have asked Don Clay to work with you in seeking a final resolution of the compliance issues by December 1.

Again, thank you for your cooperation in this matter.

Sincerely,

Lee M. Thomas

Enclosures

cc: Senator Robert W. Kasten, Jr.
Representative F. James Sensenbrenner, Jr.
Don Clay, EPA (ANR-445)
David Kee, Air & Radiation Div., Region V

Enclosure A

PSD Applicability

Port Washington Power Plant Renovation Project

(all emissions calculations are in tons per year)

Pollutant	Actual Emissions Baseline (1)	Potential Emissions (2)	Net Emissions Increase	PSD Level	Subj to P Revi
Total suspended particulate	170	283 (3)	108	25	yes
Sulfur dioxide	24,236	52,621 (3)	28,385	40	yes
Nitrogen oxides	2,991	8,201	5,210	40	yes
Carbon monoxide	144	397	253	100	yes
Hydrocarbon	17	47	30	40	no
Beryllium	0.0016	0.005	0.0034	0.0004	yes
Fluorides	38	98	60	3	yes

NOTE: PSD applicability for the other PSD regulated pollutants listed at 40 CFR Section 52.21 (b)(23)(i) and (ii) has not been determined at this time.

1) Average emissions for two-year period defined by calendar years 1983 and 1984.

2) As calculated by WEPCO based on 1992 coal type, actual emissions after ESP, and an annual capacity utilization factor of 90%.

3) An EPA estimate of potential emissions, based on existing federally enforceable limits (i.e., applicable SIP), may be higher. The indicated PSD applicability determination would, however, not change.

Enclosure B

NSPS Applicability
Port Washington Power Plant Renovation Project

FULL LOAD EMISSIONS AT CURRENT CAPACITY
(BEFORE RENOVATION)

	UNIT-1	UNIT-2	UNIT-3	UNIT-4	UNIT-5
SO2 (LBS/HR)	1417	1828	2043	1580	-0-
PM (LBS/HR)	15	16	12	12	-0-
NOx (LBS/HR)	480	352	289	221	-0-

FULL LOAD EMISSIONS AT FUTURE CAPACITY
(AFTER RENOVATION)

	UNIT-1	UNIT-2	UNIT-3	UNIT-4	UNIT-5
SO2 (LBS/HR)	2046	2037	2088	2269	2695
PM (LBS/HR)	16	16	12	17	15
NOx (LBS/HR)	696	392	297	316	369

SUBJECT TO NSPS (AFTER RENOVATION)

	UNIT-1	UNIT-2	UNIT-3	UNIT-4	UNIT-5
SO2 (LBS/HR)	YES(a)	YES(a)	YES(a)	YES(a)	YES
PM (LBS/HR)	YES(b)	NO	NO	YES(b)	YES
NOx (LBS/HR)	YES(c)	YES(c)	YES(c)	YES(c)	YES(c)

Notes:

(a) With less add-on control than NSPS requirement, emissions (lb/hr) would not increase and NSPS would not apply.

(b) Because of planned ESP upgrade, PM emissions (lb/MM Btu) after renovation are expected to be less than NSPS requirement. However, NSPS would require CEMS for opacity.

(c) Because arch-fired boilers are used at Port Washington, current NOx emissions (lb/MM Btu) are expected to be less than NSPS requirements. However, NSPS would require a CEMS for NOx.

EXHIBIT 5
TO DEFENDANTS' MEMORANDUM OF LAW IN SUPPORT OF MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

FEB 15 1989

Mr. John W. Boston
Vice President
Wisconsin Electric Power Company
Post Office Box 2046
Milwaukee, Wisconsin 52301

Dear Mr. Boston:

This is a revised final determination, on reconsideration, regarding the applicability of the Clean Air Act's New Source Performance Standards (NSPS) and Prevention of Significant Deterioration (PSD) provisions to the proposed life extension project at the Port Washington steam electric generating station, which is owned and operated by Wisconsin Electric Power Company (WEPCO). This determination supplements the determination set forth in an October 14, 1988 letter to you from Lee M. Thomas, which in turn incorporated my September 9, 1988 memorandum. I find it necessary to reconsider EPA's original determination and issue this revised determination in part to address matters raised by, and new information submitted by, WEPCO representatives since the October 10 letter. WEPCO believes that these new aspects call into question the accuracy of EPA's prior determination.

For the following reasons, EPA today reaffirms, with limited exceptions detailed below, its earlier findings regarding the Port Washington life extension project. I hereby incorporate by reference the October 14 letter and the September 9 memorandum, and reaffirm the findings and conclusions in those two documents except where they are specifically superseded below.

This action constitutes final agency action for purposes of judicial review under section 307(b) of the Clean Air Act, 42 U.S.C. Section 7607(b).

I. CAPITAL EXPENDITURE

EPA explained in its earlier determination that under the General Provision of the NSPS regulation, a physical or operational change which increases emissions at an affected facility is a modification subject to NSPS. See 40 CFR 60.14(a). However, 40 CFR 60.14(e) provides certain exceptions to that general rule. In particular, section 60.14(e) (2) provided that an increase in production rate at an affected facility would not, by itself, be considered a modification if that increase is accomplished without a capital expenditure.

As has been discussed in recent meetings between WEPCO and EPA, the October 14, 1988 letter from Lee M. Thomas was based in part on information

supplied by WEPCO in a letter dated October 11, 1988 which indicated that the increase in production rate at each of the five units would be accomplished with a capital expenditure. On October 13, 1988, and November 22, 1988 WEPCO submitted revised capital expenditure calculations. EPA has carefully reconsidered its earlier determination based on those two additional submissions(see Footnote 1). However, as explained below, they provide no grounds on which to alter EPA's earlier finding on capital expenditure.

The modification provisions are designed in part to subject to NSPS those emissions increases caused by an increase in production rate that is in turn attributable to a significant investment in improvements to the capital stock. Consistent with this intent, capital expenditure calculations employ the total, as opposed to annual, cost of a given project at each affected facility.

Thus, the December 16, 1975 preamble to the promulgated definition of capital expenditure states that "the total cost of increasing the production or operating rate must be determined. All expenditures necessary to increasing the facility's operating rate must be included in this total" (40 FR 58416) (emphasis added). The total cost of the planned work at each facility is then compared to the product of the existing facility's basis and the annual asset guideline repair allowance percentage used by the Internal Revenue Service for taxation purposes. If the total project cost for each facility exceeds the product of the basis and repair percentage for each facility, there is a capital expenditure at that facility. See 40 CFR 60.2.

It is appropriate to accumulate, for capital expenditure purposes, the cost of the renovations necessary to increase the facility's production rate, because the overall work necessary to increase a facility's production rate pursuant to a particular renovation project is the same whether the work is performed in one calendar year or during two (or more) years. The use of annual costs could encourage sources to distort normal business planning by artificially stretching out costs over time as a means of evading a finding of capital expenditure and consequent NSPS coverage (see Footnote 2).

(Footnote 1) October 13, 1988 submission was not received in time to be considered in issuing EPA's letter of October 14, 1988.

(Footnote 2) Indeed, it appears that WEPCO may have extended the planned length of the Port Washington life extension project for precisely this purpose after being informed by EPA in the October 14, 1988 letter that there would be a capital expenditure using the original schedule. The unit 1 renovations have been extended from four years to five; unit 2 has been extended from four years to six; unit 3 had been extended from three years to six; unit 4 has been extended from two years to four. (Compare Telecopier Transmission, Neil Childress, WEPCO, to Gary McCutchen, EPA, October 11, 1988 (table attached to Response to Question No. 4) with Letter, Neil Childress, WEPCO, to Walt Stevenson, EPA, November 22, 1988, at page 2.)

Rather, the purpose of the exemption in 40 CFR 60.14(e) (2) is to exclude from NSPS coverage increases in production rate that are accomplished without "an expenditure for long-term additions or improvements." See 39 FR 36948 (preamble to proposed NSPS regulations). Where the economic realities of the case are that increased production and, hence, emissions, are due to normal fluctuations in the business cycle rather than a considered decision to invest in substantial capital improvements, the NSPS do not apply.

The letter submitted on October 13 from Neil Childress of your staff to Gary McCutchen of EPA presented updated basis figures (determined by multiplying the original capital investment in the facility by a coefficient representing the inflation in construction costs between the year of the investment and the year in which the capital expenditure calculation is made) for each of the emissions units at Port Washington. These figures included costs of repair or replacement of equipment, such as steam turbines, that is not part of the existing affected facility for NSPS purposes. Since applicability determinations under the NSPS modification provisions are based on the existing affected facility, capital expenditure determinations likewise are limited to costs associated with the affected facility. For NSPS Subpart Da, the affected facility is the steam generating unit as defined at 40 CFR 60.40a. Therefore, EPA staff requested WEPCO to limit the basis figures to the steam generating unit.

The November 22, 1988 letter from Neil Childress to Walt Stevenson of EPA presented revised cost figures on the renovation work on steam generating units 1 - 4 related to the capital expenditure calculations. These November 22 basis figures are understood to be limited to costs associated with the affected facility. The November 22 letter also presented a revised and extended schedule for the renovation work, under which the costs of repairs in any one year would not exceed the product of the annual asset guideline repair allowance percentage, which is 5% for electric utility steam generating units, and the basis of each unit. Mr Childress' letter concluded that since 5% of each

unit's updated basis is not exceeded by the cost of renovation work in any one year, there would not be a capital expenditure at any of the units. The revised figures also show that the total costs for each unit over the entire renovation period would exceed the 5% basis figure by 50% to 325%.

As explained above, it is the total cost, not the annual cost of a renovation project that determines whether a capital expenditure has occurred. Accordingly, based on the calculations and total project costs in WEPCO's November 22, 1988 letter, the proposed project would result in a capital expenditure at each of the five Port Washington units, and those units would not qualify for the exemption in the NSPS modification provisions at 40 CFR 60.14(e) (2) (see Footnote 3). As to unit 5, WEPCO did not submit cost data limited to the affected facility. Thus, I have no reason to alter EPA's original determination that WEPCO has not demonstrated that the increase in production rate at unit 5 can be accomplished without a capital expenditure.

In addition, I have determined that it is more appropriate to utilize the original basis of each affected facility (as adjusted to reflect past capital improvements), expressed in nominal dollars, rather than the updated basis, expressed in current dollars, in determining NSPS applicability. Thus, even if WEPCO were correct that annual renovation costs, rather than total costs, should be used in capital expenditure calculations, in this case a comparison of annual renovation costs and the

---

(Footnote 3) WEPCO has argued that since the definition of capital expenditure at 40 CFR 60.2 refers to the IRS "annual asset guideline repair allowance percentage" (emphasis added), EPA is bound by the literal language of its own regulations to use annual rather than total project costs in making capital expenditure calculations. However, the regulations do not dictate such a result. Instead, on their face they call for a comparison between total renovation costs and the annual asset guideline. Had EPA intended the result suggested by WEPCO, it would have explicitly called for comparison of annual costs of the change for project, exceeding one year with the annual asset guideline. This it did not do. In addition, as indicated above, the purpose of the capital expenditure provision would not be served by annualizing project costs for capital expenditure purposes.

(adjusted) original basis of each affected facility shows that a capital expenditure would still occur (see Footnote 4).

In making a more detailed inquiry into the capital expenditure matter in response to WEPCO's request, I have found that neither the NSPS General Provisions nor the preamble thereto contain any discussion of the matter of original versus updated basis, and that EPA has rarely been called upon to address this issue. However, upon review of EPA's past practice in this area, I have found that in developing performance standards for particular industries, EPA has provided the regulated community a mechanism to calculate the original basis in making capital expenditure calculations. See, e.g., "Equipment Leaks of VOC in Petroleum Refining Industry -- Background Information for Promulgated Standards," EPA-450/3-81-015b, December 7, 1983 (see Footnote 5). This suggests that EPA intended the original basis to be utilized to determine whether a capital expenditure is going to be made.

Moreover, I believe that the use of original basis is consistent with the overall purpose of the NSPS modification regulations in general, and the capital expenditure provisions in particular. The effect of using original basis is that the greater the age of an affected facility, the more likely it is that a given investment resulting in increased production will be deemed a capital expenditure and trigger NSPS. This is consistent with Congress' intent in adopting new source performance standards. Older facilities are more likely to use outdated equipment which does not reduce pollution to the extent more current technology does. Congress included modified sources within the new source performance standards of section 111 to ensure the use of new technology on such sources. See CAA Sections 111(a) (2) , 111(a) (4);

II. AIR HEATER RENOVATIONS AT UNIT 1

In January 1989, WEPCO asked EPA to determine whether replacement of the heat transfer surface elements on the unit 1 air heater would trigger PSD or NSPS applicability. However, in a letter dated February 3, 1989, WEPCO withdrew this request,

---

(Footnote 4) It is worth noting in this regard that if EPA were to adhere to a literal reading of IRS guidelines as urged by WEPCO, it would have no choice but to use original basis as well as annualized costs in making capital expenditure calculations for Port Washington. Using this formula, WEPCO would exceed the repair allowance percentage at units 1 - 5 for mostyears, and NSPS would still apply.

(Footnote 5) This Background Information Document provides an alternative to the method prescribed in the General Provision when it is difficult to determine original costs. The formula uses replacement costs and an inflation index to "approximate the original cost basis of the affected facility."

asserting that it could not receive approval in the time necessary, while reserving the right torenew it at a later time as to unit 1 or any other unit at Port Washington. Because this issue may arise again, and because I believe it bears upon the project as a whole, I find it appropriate to address the matter of air heater element replacement. Based on the information submitted regarding this new plan, as well as the earlier information submitted regarding air heater replacement work, I conclude that if WEPCO were to proceed under its revised and now withdrawn plan, it would not alter EPA's earlier finding that PSD and NSPS would apply. In order to explain this finding, it is useful to first summarize the relevant facts.

Originally, WEPCO advised EPA that it planned to replace the air heaters at units 1 - 4 in their entirety. As WEPCO explained:

> Air heaters are subject to the erosive and corrosive effects of the flue gas passing through them and require regular maintenance of the heat transfer surfaces.

The plate-type air heaters on Units 1 - 4 do not lend themselves to replacement of the individual elements. Worn sections have been patched and blocked, where accessible, over the years. Now, however, overall corrosion and perforation has passed beyond the practical point of repair, and replacement of the air heaters is the economical way to maintain the air preheater system.

The air heaters on Port Washington Unit 5 and the other units on the Wisconsin Electric system [other than Port Washington units 1 - 41 are of the Ljungstrom basket design, which allows the heat transfer surfaces (baskets) to be replaced easily. ***

See, e.g., List of Port Washington Projects, p. 6 (Attachment to April 21, 1988 letter from John W. Boston, WEPCO, to Gary McCutchen, EPA).

On January 11, 1989, WEPCO informed the State of Wisconsin that it was considering replacing all the plate elements at unit 1. In a letter to the State of Wisconsin, WEPCO described this project as routine repair work, "necessary to halt the continuing decrease in the capability of Unit 1," and submitted a list of 40 generating units where significant portions of the air heater have been replaced. See Letter, with attachment, from Mark P. Steinberg, WEPCO, to Dale Ziege, Wisconsin Department of Natural Resources, January 11, 1989.

In a telephone conversation with EPA staff the next day, WEPCO indicated that it desired to perform the unit 1 plate replacement work during a current unit outage; that it intended to replace only half, not all, of the elements, at a cost of approximately $500,000; that it intended to later scrap this work and replace the entire air heater as described in the original scope of work, at a cost of $2,600,000; and that it was considering performing the same work at unit 4 also. See Record of Telephone Conversation between David Schulz, EPA, and Mark Steinberg, Neil Childress, and Walter Woelfle, WEPCO, January 12, 1989.

In a meeting on January 17, 1989, WEPCO related that if it eplaced half of the plate elements now, it probably would replace the remainder as part of the total renovation project at a later date and not replace the air heater in whole. WEPCO also related that complete replacement of the plate elements should increase unit 1's capability to the original design capacity. Finally, WEPCO stated in response to questions from EPA staff that none of the air heaters or plate elements at units 1 - 4 had ever been replaced in the past. See Memorandum, Meeting with WEPCO regarding the Port Washington Generating Station, from David Schulz, EPA, to Files, January 27, 1989.

In addition to the above information, I note that WEPCO's list of 40 units at which air heater element replacements have occurred include no units containing plate elements such as those on units 1 - 4 at Port Washington. Instead, all of the examples submitted are of the Ljungstrom basket type or the tubular type. I conclude that those examples are too dissimilar to the plate-type elements in use at units 1 - 4 to support WEPCO's contention that the work in question is routine (see Footnote 6).

Based on all of the foregoing, I find no reason to depart from EPA's earlier conclusion that PSD and NSPS would apply to the air heater work on unit 1. It appears that despite WEPCO's recent recharacterization of this work as a separate project, it in properly viewed as an integral part of the overall Port Washington life extension project. WEPCO cannot evade PSD and NSPS applicability by carving out, and seeking separate treatment of, significant portions of an otherwise integrated renovation program. Such piecemeal actions, if allowed to go unchallenged, could readily eviscerate the clear intent of the Clean Air Act's

---

(Footnote 6) Further, even the list of air heater replacement work submitted by WEPCO did not establish this as routine repair work. Those 40 units comprise only a small fraction of total operating utility units, and even at the 40 units, air heater repair or replacement appears to have been a one-time occurrence, not routine repair.

new source provisions. Accordingly, if seen as part of WEPCO's previously proposed renovation project, the recent recharacterization of the unit 1 air heater work does nothing to alter the factors determinative of PSD and NSPS coverage.

III. CAPACITY TESTING FOR UNITS 1 - 4

A. Impact of Test Results on NSPS Applicability.

In Lee Thomas' October 14, 1988 letter, EPA stated that baseline emissions for NSPS purposes are determined by hourly maximum capacity just prior to the renovations. EPA relied on actual operating data to determine that current maximum capacity at units 1 - 4 has significantly deteriorated, such that the restoration of original design capacity through the life extension project would result in corresponding emissions increases. As to unit 5, EPA stated that current capacity at unit 5 is zero because it is physically inoperable. EPA rejected WEPCO's unsupported assertions that all five units could be operated at high capacities, but held open the possibility of further discussions on that point. Subsequently, in November and December of 1988, following discussions with EPA, WEPCO conducted capacity tests to determine current actual capacity.

Based on its review and analysis of the test data, EPA finds that the tests adequately demonstrate that units 2 and 3 can be operated at their original design capacity on a sustained basis. Accordingly, I hereby supersede EPA's earlier determination and find that NSPS would not apply to units 2 and 3 by virtue of the proposed renovations so long as the capacity of these units after completion of the work is no higher than demonstrated in the recent tests (694,000 and 690,000 pounds of steam per hour, respectively). As discussed in more detail below, this revised NSPS determination does not affect our determination that the PSD provisions would be applicable to the proposed work on these two units.

During the tests on units 1 and 4, WEPCO was able to operate these units at 497,000 and 586,000 pounds of steam per hour, respectively, representing 72% and 89% of these units' respective original design capacities. These tests are adequate to confirm EPA's original determination that units 1 and 4 are not capable of operating at their original design capacities, and that restoration of the lost capacity through the life extension will trigger NSPS coverage. EPA today also determines that these tests are not adequate to show that current actual capacity for purposes of establishing the NSPS baseline is as high as the levels achieved during the recent tests. Rather, I reaffirm that baseline for those units is determined by the lower capacities reflected in recent actual operating data as set forth in Lee Thomas' October 14 letter. EPA must reject the tests for purposes of establishing

actual NSPS baselines because during the testing discussed above, there were significant, measured exceedances of the applicable particulate mass emission limit, and several measured exceedances of the applicable opacity limit contained in the Wisconsin State Implementation Plan. One of the purposes of these tests was to determine the maximum actual capacity of the Port Washington units that can be achieved in a lawful manner. As a consequence of the measured exceedances, WEPCO's tests cannot be relied on to demonstrate that the company could lawfully sustain the levels achieved during the testing.

Regarding unit 5, I find that by declining to conduct or schedule capacity tests, WEPCO has effectively conceded that unit 5 is at present inoperable. Therefore, I reaffirm that its baseline for NSPS purposes is zero.

B. Impact of Test Results on PSD Applicability.

In its February 3, 1989 letter, WEPCO asserted that EPA's October 14, 1988 determination assumed that the emission rate of each unit would increase following the renovations. Thus, WEPCO claims, EPA did not address the question whether units that are not increasing their emission rates following renovation can be deemed to trigger PSD. WEPCO is incorrect on both counts.

EPA's prior determination explained that under the PSD program, unlike NSPS, baseline emissions are determined by representative actual emissions prior to the physical or operational change. Accordingly, the results of testing conducted by WEPCO, intended to determine current maximum hourly capacity, have no impact on the existence of a significant net emissions increase for PSD purposes. Hence, those test results provide no reason to alter EPA's prior determination regarding PSD applicability.

Actual emissions are the product of the emission rate (amount of pollution per unit of production or throughput, e.g., pounds of sulfur dioxide per ton of coal combusted), the production rate or capacity utilization (amount of production or throughput per hour, e.g., tons of coal combusted per hour), and the hours of operation (e.g., hours per year). In its prior determination, EPA explained that an increase in any one of these three factors, if attributable to a physical or operational change, can trigger an emissions increase for PSD purposes, and rejected WEPCO's contention that only increases in the emission rate were determinative. In so doing, EPA explicitly assumed that emissions increases at Port Washington would come not from an increase in emission rate, but rather from increases in production rate or hours of operation. Sec Memorandum from Don R. Clay, September 9, 1988 at 8.

WEPCO further implies in its February 3, 1989 letter that the demonstration that units 2 and 3 can operate now at maximum design capacity means that there will be no increase in production rate for PSD purposes following the renovations. This is not the case because PSD baseline emissions are determined by representative actual emission rate, production rate, and hours of operation prior to the physical change. Representative actual emissions are determined by examining the actual emissions during a representative two year period, (See 40 CFR 52.21(b) (21) (ii)) which in this case the Administrator determined to be 1983 and 1984 (See Lee Thomas' Oct. 14 letter, at 5) . The hourly capacity demonstration for NSPS purposes is not relevant to the PSD analysis.

IV. NSPS OPERATIONAL LIMITATIONS

In my September 9, 1988 memorandum, I pointed out that an affected facility cannot avoid NSPS applicability by offsetting, through the use of fuel with a lower sulfur content, an increase in the emission rate that would otherwise occur due to a physical or operational change. As I explained at that time, 40 CFR 60.14(e) provides that use of an alternative fuel or raw material -- such as higher-sulfur coal -- which an existing facility was designed to accommodate before a physical or operational change does not constitute a modification for NSPS purposes. It follows that the facility cannot avoid NSPS by switching to lower-sulfur fuel to counteract a prospective increase in emission rate because, under the regulations, the facility would always have to option to switch back to a higher-sulfur fuel at a later date without triggering NSPS.

Subsequent to the issuance of EPA's October 14, 1988 letter, WEPCO inquired whether it might be able to utilize lower-sulfur coal to avoid NSPS at Port Washington, notwithstanding the regulatory provision explained above, by agreeing to federally enforceable permit conditions that would bar the company from switching back to higher sulfur coal in the future. Restrictions of this nature are acceptable for netting transactions under the Act's PSD provisions. However, the statute reflects a basic political decision that fossil fuel-fired sources not rely only on natural occurring less-polluting fuels to comply with the NSPS. Instead, Congress declared that compliance must depend in part upon the application of flue gas treatment or other pollution control technologies. Thus, section 111(a) (1) (A) (ii) defines "standard of performance" for fossil fuel-fired sources as requiring the achievement of a percentage reduction in the emissions from such category of sources from the emissions which would have resulted from the use of

fuels which are not subject to treatment prior to combustion. Congress further clarified this point in a later paragraph of section 111(a) by adding:

For the purpose of subparagraph (1) (A) (ii), any cleaning of the fuel or reduction in the pollution characteristics of the fuel after extraction and prior to combustion may be credited ... to a source which burns such fuel.

This core policy judgment is reflected as well in the legislative history of the 1977 Clean Air Act amendments. For example, the Conference Report states:

The Senate concurs in the House provision with minor amendments. The agreement requires (1) that the standards of performance for fossil fuel-fired boilers be substantially upgraded to require the use of the best technological system of continuous emission reduction and to preclude use of untreated low sulfur coal alone as a means of compliance; ... (3) that for fossil fuel-fired sources, the new source performance standards must be comprised of both a standard of performance for emissions and an enforceable requirement for a percentage reduction in pollution from untreated fuel.

H.R. Rep. No. 95-564, 95th Cong., 1st Sess. 130.

Because the will of Congress is so clear that lower-sulfur fuels alone will not suffice to comply with NSPS, it would be inconsistent with the legislative intent for EPA to allow sources to use lower-sulfur fuel to avoid coverage of NSPS in the first instance in the manner suggested by WEPCO. If EPA were to follow such a course, numerous modifications to existing facilities could escape coverage in a manner contrary to the statutory purpose.

V. THE TIMING OF THE LIFE EXTENSION PROJECT

In discussions with EPA, WEPCO has challenged, on grounds of timing, EPA's position on baseline emissions for NSPS purposes. In its prior determination, EPA explained that under the NSPS regulations, baseline emissions are determined by hourly maximum capacity just prior to the renovations. Thus, the baseline for unit 5 at Port Washington is zero because the unit has been shut down for several years due to safety concerns. In response,

WEPCO has presented the hypothetical question whether EPA would still have found a zero baseline if unit 5 had been shut down on a Friday due to some unexpected or catastrophic failure of a major component previously in good working order, and WEPCO had sought to replace that component on the following Monday. WEPCO asserts that in such circumstances, EPA should have established baseline emissions using the emissions rate just prior to the breakdown.

I find it unnecessary to engage in speculation by addressing the hypothetical situation presented by WEPCO, because it is far removed from the true circumstances surrounding the proposed Port Washington life extension project. In fact, unit 5 has been shut down for over four years, not a weekend, and that is the foundation of EPA's analysis and determination.

In conclusion, with limited exceptions, EPA today reaffirms the decisions reached in the October 14 determination. In addition, EPA has concluded that the work on each unit constitutes a capital expenditure and that the proposed air heater plate replacement work on unit 1 would trigger PSD and NSPS. As a result of the capacity test demonstration, however, I find that units 2 and 3 at Port Washington can be operated at their design capacity on a sustained basis. Therefore EPA's earlier determination with respect to NSPS applicability is superseded and NSPS would not apply to units 2 and 3 by virtue of the proposed renovations so long as the capacity of these units after the completion of this work is no higher than demonstrated in the recent tests. This determination does not affect PSD applicability for these two units. If you should have any questions about the foregoing, please feel free to contact me. Thank you for your cooperation in this matter.

Sincerely,

Don R. Clay
Acting Assistant Administrator
for Air & Radiation

EXHIBIT 6
TO DEFENDANTS' MEMORANDUM OF LAW IN SUPPORT OF MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

United States General Accounting Office

GAO

Report to the Chairman, Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives

September 1990

ELECTRICITY SUPPLY

Older Plants' Impact on Reliability and Air Quality

GAO/RCED-90-200

GAO
United States
General Accounting Office
Washington, D.C. 20548

Resources, Community, and
Economic Development Division

B-240541

September 10, 1990

The Honorable John D. Dingell
Chairman, Subcommittee on Oversight
and Investigations
Committee on Energy and Commerce
House of Representatives

Dear Mr. Chairman:

As you requested, we reviewed electric utilities' plans for extending the useful life of older fossil fuel power plants and examined the effects of life extension on the reliability of the nation's power supply and on air quality.

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies of this report to the Secretary of Energy and the Administrator, Environmental Protection Agency. We will also make copies available to others upon request.

This work was performed under the direction of Victor S. Rezendes, Director, Energy Issues, (202) 275-1441. Major contributors to this report are listed in appendix III.

Sincerely yours,

J. Dexter Peach
Assistant Comptroller General

plant, if altered as proposed, would be required to meet the act's more stringent emission standards. This decision was the first instance of EPA's requiring a plant undergoing life extension to achieve the NSPS and the PSD program requirements. EPA's ruling was based on a determination that (1) the proposed changes to the power plant would go beyond "routine repair" and would therefore not be exempt and (2) emissions would increase as a result of the project.

The utility challenged EPA's definition of routine repair and its method for calculating increases in emissions. Following litigation, in January 1990 the United States Court of Appeals for the Seventh Circuit affirmed EPA's application of the NSPS, but remanded the decision to apply the PSD program standards back to EPA for further review. Specifically, the Court held that, in this instance, the proposed changes were not routine and thus not exempt from the standards and that an increased emission rate would result; thus, EPA had correctly applied the NSPS. However, the court ruled that EPA had not used an appropriate method for determining the total annual increase in emissions and instructed EPA to reexamine the application of the PSD program provisions. The Court added that EPA is entitled to broad discretion in interpreting the technical provisions of the Clean Air Act and its own regulations.[7]

Effects of WEPCO Ruling Are Uncertain

Officials of DOE and utility organizations have expressed concern that the WEPCO decision may result in EPA's application of the NSPS and the PSD program requirements to other previously exempt power plants and that the additional costs of achieving these standards and requirements could discourage some life extension projects. However, EPA officials do not consider WEPCO's project typical of most utility life extension projects, and they expect that the ruling will not significantly affect utilities' decisions to undertake power plant life extension projects.

According to NERC, the ruling could seriously threaten the reliability of the nation's electric system if it were applied to other life extension projects, as the additional cost for emission control equipment could force utilities to remove older plants from service. According to EEI, serious problems with the reliability of the electric system could be encountered, including brownouts, as utilities adjust their plans and

[7]Wisconsin Electric Power Co. v. Reilly, AD. EPA, 893 F.2d 901 (7th Cir. 1990)

pursue other sources of new generating capacity. The Utility Air Regulatory Group (UARG)[8] has expressed concern over whether power plants can be maintained properly without being required to achieve the more stringent emission standards. DOE has stated that EPA's WEPCO ruling could discourage some utilities from extending the service life of their power plants and that this could aggravate an expected shortfall in electric generating capacity in the 1990s.

The frequent application of the NSPS and the PSD program requirements to previously exempt power plants or similar legislative action could improve air quality. During 1985 power plants exempt from the Clean Air Act's more stringent emission standards produced sulfur dioxide emissions at up to nearly 3 times the rate, per unit of electricity produced, of power plants subject to these standards. Because new power plants are subject to more stringent emission standards, there is an incentive to extend the life of existing plants that are not subject to these costly standards. If decisions similar to the WEPCO decision were rendered more often, a decision to build a new plant or extend the service life of an existing plant would depend on the relative costs of two sources emitting pollution at a low rate, and not on a comparison of the high cost of a new plant emitting pollution at a low rate and the lower cost of an older plant emitting pollution at a higher rate.

Officials from seven of the nine utilities we contacted indicated that the WEPCO decision was not interfering with their plans for the continued operation of their existing plants.[9] These officials explained that WEPCO's project involves the restoration of generating capacity at a deteriorated plant and that this situation is unlikely to occur in their systems because their maintenance programs prevent their plants from deteriorating. Officials from one of the nine utilities we contacted indicated that the WEPCO ruling has played a role in the utility's revising its plans. In its annual submission to its public utility commission, this utility explained that because of legislative and regulatory uncertainties (including the uncertainty raised by the WEPCO decision), it has deferred implementing a life extension program. However, the utility reported that it will continue to maintain its plants to ensure their reliable and safe operation.

According to EPA policy officials, WEPCO's life extension project is not typical of the majority of utilities' life extension projects, and concerns

[8]UARG is an ad hoc association of utilities and trade associations of the utility industry.

[9]One utility did not respond to our questions about the potential impact of the WEPCO ruling on power plant projects.

that the agency will broadly apply the ruling it applied to WEPCO's project are unfounded. The officials noted that many life extension projects do not result in increased emissions, while other activities are routine in nature and thus exempt from the modification rule. Lending evidence to the officials' statements, EPA's 1989 emission forecast assumed that the WEPCO decision would not result in a significant number of additional power plants' having to comply with the NSPS and the PSD program requirements.

Supplying Electricity May Result in Short-term and Long-term Trade-offs

In the short term, utilities may face trade-offs between ensuring the existence of generating capacity sufficient to meet needs and reducing air pollution. More stringent emission requirements could adversely affect electricity supply in the short term. However, applying more stringent emission requirements to currently exempt plants would have the benefit of eliminating the power plants that pollute the most.

A trade-off between sufficient capacity and clean air need not exist in the long term. Requiring exempt power plants to meet the requirements of the NSPS and PSD program would result in emission reductions at existing plants or less-polluting new plants. The cost of reducing emissions would be reflected in the cost of producing electricity. The long-term trade-off could be between cleaner air and more expensive electricity rather than between cleaner air and insufficient capacity.

EPA Has Taken Steps to Reduce Uncertainty Over Emission Standards

EPA has taken steps to reduce the uncertainty over the emission standards applicable for renovated power plants. According to EPA officials, EPA relies on state environmental agencies to identify power plant renovation projects and apply the requirements of the NSPS and PSD program on a case-by-case basis and provides guidance to the agencies when requested to do so. EPA's review is required when a state agency determines a modification permit is necessary. Two state environmental agencies we contacted indicated that they have not routinely reviewed utilities' life extension plans or coordinated with public utility commissions and so are generally unaware of utilities' renovation projects.

In 1989 EPA initiated a survey of utilities that was designed to help the agency identify, among other things, the extent to which life extension activities are occurring and the distinction between routine activities and life extension projects. In explaining the need for the survey, EPA noted that (1) the number of utilities requesting EPA to determine whether a proposed project constitutes a modification is expected to

EXHIBIT 7
TO DEFENDANTS' MEMORANDUM OF LAW IN SUPPORT OF MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

April 10, 1990

OFFICE OF
POLICY, PLANNING AND EVALUATION

Stevenson
Porter
Crowder
Dorkee
McCutchen
Solomon
Farmer
Ajax

SUBJECT: GAO Exit Conference

FROM: Steve Tuber
EPA/GAO Liaison Officer

TO: Office of Air and Radiation
Attention: Nancy Kete
Brian McLean
Fred Porter

Office of Policy, Planning and Evaluation
Attention: Air and Energy Policy Division

Attached is a GAO fact sheet on aging fossil fuel power plants that will be discussed at a meeting with GAO officials Thursday, April 12, at 3:30 p.m. The conference call meeting will take place in room 943 WT.

The fact sheet provides findings without conclusions or recommendations. GAO is interested in preparing an accurate and timely report, therefore, the purpose of the meeting is for EPA staff to discuss the tone, accuracy and thoroughness of the facts as presented.

There are several restrictions on the fact sheet, which is the property of GAO. Do not reproduce the document nor discuss its information outside the Agency. We must abide by these restrictions. Please return the document to GAO at the conclusion of the meeting, or as otherwise agreed upon.

Please call Marianne Bailey (382-4020) should you have any questions.

Attachment

THURSDAY. 3:30 PM
Jim Crowder's Office.
Conference Call

DRAFT

UTILITY DECISIONMAKING FOR AGING POWERPLANTS

BACKGROUND

-- Due to increasing regulatory uncertainty and financial risks, most utilities are not planning to construct new powerplants through 1996.

-- A recent DOE study estimates that 73,000 MW of capacity are needed beyond what utilities have planned through the year 2000.

-- NERC projected that planned capacity would be insufficient by 1998 unless utilities construct additional capacity.

-- Utilities will increasingly rely on their existing fossil-fueled plants as the primary alternative option for meeting future electricity demand.

-- Historically, older fossil-fueled plants tended to have operational problems and required increased maintenance. After 30 years, breakdowns are more frequent than for newer plants and the time it takes to repair the plants increases.

-- Utilities will need to make investments in existing fossil-fueled plants to extend their useful lives beyond the traditional 30 to 40 service life.

-- The Department of Energy (DOE) estimates that 164,000 MW will be life extended between 1988 and 2000.

LIFE EXTENSION

-- Life extension is a generic term that includes a variety of maintenance, repair, and equipment replacement activities.

-- The goal of life extension activities is to return the powerplant to its original operating efficiency and to maintain that status for an additional 20 to 30 years.

-- The extent of upgrading and or refurbishment needed depends on how the plants were maintained and used since they were put in service.

-- DOE has described three approaches utilities can choose to implement life extension. These approaches are "front-end", "phased", and "enhanced maintenance".

-- Utility officials we contacted generally were optimistic about the expected performance of their older plants.

DRAFT

-- DOE and EPRI publications expressed optimism regarding the reliability of life-extended plants. However, the studies cautioned that a lack of operating data precluded making any guarantees about how well life-extended plants will function.

-- NERC's annual reliability assessments in 1988 and 1989 concluded that the continued operation of existing utility generating capacity is subject to uncertainty, and the extent to which older capacity will be available will depend upon several factors, including the success of life extension.

INCREASED RELIANCE ON OLDER POWERPLANTS

-- DOE forecasts a significant increase in the generating capacity represented by older fossil-fueled plants through 1998. Older fossil-fueled powerplants, those thirty years or older, represented 13 percent of the nation's total generating capacity in 1989; this is expected to increase to 27 percent by 1998.

-- Several utilities we contacted are planning to increase the capacity factors at many of their older plants and are planning to operate some older plants at baseload levels during the next 10 to 20 years.

-- According to NERC, increased reliance on older fossil-fueled capacity contributes to an increased, but as yet undetermined, risk regarding the reliability of electric power.

PRE-1971 PLANTS ARE A MAJOR SOURCE OF AIR POLLUTION

-- When Congress passed the Clean Air Act Amendments of 1970, it exempted powerplants constructed prior to August 17, 1971 from the stringent emission standards. Congress anticipated that many of these pre-1971 plants would be retired within their traditional 30 to 40-year service life.

-- In response to the Clean Air Act Amendments of 1977, EPA developed new, more stringent standards regulating utility powerplant emissions. The standards were designed, in part, to significantly reduce utility SO2 emissions from new plants relative to existing plants. EPA expected these standards to result in significant reductions in SO2 emissions after 1995, as the pre-1971 plants were retired and replaced by new, less polluting plants. EPA's forecast assumed that the operating life of existing plants would be approximately 30 years.

DRAFT

-- The life extension phenomenon is keeping many of the pre-1971 plants in service longer.

-- Pre-1971 fossil-fueled powerplants produced the majority of utilities' SO2 and NOx emissions in 1985. Of the 16 million tons of SO2 emitted from utility powerplants, the pre-1971 plants emitted 88 percent of the total. Utility powerplants also emitted 7 million tons of NOx, and the pre-1971 plants contributed 79 percent of the total.

-- EPA, in its 1989 emission forecast, assumes that most fossil-fueled plants will be life extended and operated for an additional 25 to 35 years. The forecast, which assumes that federal acid rain control legislation will not be enacted, includes two scenarios; one assumes a 65-year plant life and the other a 55-year plant life. In either scenario, EPA does not expect significant near-term SO2 emission reductions, due in part to the longer powerplant lifetimes.

-- A 1985 Congressional Research Service study showed that, in the absence of acid rain control legislation, changing the powerplant lifetime assumption from 40 to 60 years delayed significant emission reductions for approximately 30 years.

-- A 1988 study performed by the Ohio Office of Consumer's Counsel indicated that, without enactment of acid rain control legislation, SO2 emissions in Ohio are expected to increase by 14 percent during 1987-2005. The projected SO2 increases are attributed to greater reliance on existing plants.

-- A study performed by the Illinois Department of Energy and Natural Resources indicated that utilities' SO2 emissions in Illinois declined during 1980-1986, and that this trend will continue until 1990. The study also indicated that, in the absence of acid rain legislation, emissions will rise between 1990 and 2005, after which, emissions will decline as older plants are removed from service.

-- EPA, in its 1989 emission forecast, projected that changes in future NOx emissions could range from a steady increase through 2010 (in the scenario with a 65 year plant life) to a leveling off around the year 2005 (in the scenario with a 55 year plant life). NOx emissions are not forecasted to decline in either of the projections because as existing fossil-fueled plants are replaced with new facilities, NOx emission rates are not significantly reduced.

DRAFT

AIR QUALITY REGULATIONS MAY AFFECT LIFE EXTENSION PLANS

WEPCO

-- In 1977, EPA did not consider it likely that many existing powerplants would be modified or reconstructed and thereby subject to the NSPS and PSD requirements. At the time, EPA assumed that plants would continue to be replaced at the end of the traditional 30 to 40 year service life.

-- Throughout the 1980s, various DOE, industry, and trade publications discussed the trend towards life extension. These publications warned that life extension projects may become subject to the NSPS requirements.

-- In March 1986, EPA officials responsible for policy analysis wrote an article discussing life extension and its implications for air quality. EPA also considered various policy alternatives to deal with life extension. For example, EPA considered changing (1) the reconstruction rule to accumulate costs over a number of years rather than applying it to a specific project, and (2) the modification rule to eliminate certain exemptions. EPA decided against implementing these changes.

-- EPA did not develop a policy that explicitly addressed when NSPS and PSD requirements would apply to life extension projects. EPA relied on state and local air pollution control agencies to enforce the emission standards on a case-by-case basis.

-- In 1989 EPA initiated a survey to collect data on utilities' life extension programs. The Office of Management and Budget has denied EPA's request to circulate this survey.

-- In October 1988, EPA determined that the NSPS and PSD emission standards should apply to a proposed life extension project of the Wisconsin Electric Power Company (WEPCO). EPA ruled that the proposed renovation constituted a modification and, as a result, the utility would be responsible for ensuring that the life-extended plant achieve the more stringent new source standards.

-- In January 1990, the United States Court of Appeals for the Seventh Circuit upheld EPA's modification determination for NSPS but remanded the case to EPA for further PSD review. Also, the Court added that EPA is entitled to broad discretion in interpreting the technical provisions of the Clean Air Act and its own regulations.

DRAFT

-- EPA's WEPCO decision is the first instance of EPA requiring a life-extended plant to achieve NSPS and PSD standards.

-- Compliance with NSPS and PSD regulations can require utilities to install expensive emission control equipment which can significantly increase the cost of a life extension project.

-- Several industry associations contend that the WEPCO decision will inhibit the utility industry's ability to properly maintain their existing facilities and that this has adverse consequences for the nation's electricity supply.

-- DOE's has expressed concern that the WEPCO decision could aggravate the anticipated shortfall in electric generating capacity in the 1990s. Also, DOE officials said that the decision was adversely affecting the DOE Clean Coal Technology program.

-- According to EPA policy officials, the WEPCO decision does not represent a broad EPA policy to control emissions from life-extended powerplants.

-- EPA's 1989 emission forecast assumed that the WEPCO decision would not result in any significant number of powerplants having to comply with NSPS and PSD requirements.

-- Few life extension projects have ever been reviewed by the states or EPA. According to EPA, for some projects that states have reviewed, state decisions appear to be inconsistent with EPA policy.

ACID RAIN CONTROL LEGISLATION

-- In June 1989, the Bush Administration announced its Clean Air Amendments of 1989 which, if enacted, would target some of the same older powerplants that are prime candidates for life extension.

-- The goals of the Administration's acid rain control program are to reduce electric utility emissions of SO2 by 10 million tons from 1980 levels, and emissions of NOx by 2 million tons from levels that are predicted for the year 2000. The reductions are to be accomplished in two phases--the first phase by the end of 1995 and the second by 2000.

-- Utility industry officials have raised concerns regarding the cost of achieving the required emission reductions but have raised little concern regarding the proposal's impact on life extensions or system reliability.

DRAFT

-- Utilities are generally planning to meet the emission reduction requirements of the Administration's acid rain control proposal by coal switching and installing scrubbers; few powerplant retirements are expected.

-- Utility industry representatives claim that EPA's application of NSPS and PSD requirements in conjunction with an acid rain control bill will add significant costs to achieving the required reductions.

EXHIBIT 8
TO DEFENDANTS' MEMORANDUM OF LAW IN SUPPORT OF MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

A-90-56

II-I-20

U.S. House of
Subcommittee on Oversight and Investigations
of the
Committee on Energy and Commerce
Washington, DC 20515

October 9, 1990

The Honorable James D. Watkins
Secretary
Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585

The Honorable William K. Reilly
Administrator
Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

The Honorable Michael J. Boskin
Chairman
Council of Economic Advisers
Old Executive Office Building
Room 314
17th and Pennsylvania Ave., N.W.
Washington, D.C. 20500

Dear Secretary Watkins, Administrator Reilly and Mr. Boskin:

Enclosed for your review, information, and comment to the Subcommittee is a General Accounting Office (GAO) September 10, 1990 report (B-240541) entitled: "Electricity Supply -- Older Plants' Impact on Reliability and Air Quality." It is helpful and timely.

The report discusses a "relatively recent phenomenon" called "life extension" of fossil fuel power plants or units. GAO calls this a "generic term" which "covers a variety of activities, including maintaining, restoring, and repairing power plant components." GAO cites Department of Energy (DOE) and the North American Electric Reliability Council (NERC) predictions for electricity demand through the 1990s, saying it will "increase" and outstrip "planned additions to generating capacity." GAO states that utilities plan "to meet future demand in part by extending the service life of fossil fuel plants beyond their originally anticipated retirement date." I understand that these are defined as units or plants that are 30 years or older. They represent "7

as units or plants that are 30 years or older. They represent "7 percent of U.S. utilities' electricity generation" from 1985-88 and in 1998, generation from such plants are expected to increase to 27 percent.

The General Accounting Office report points out that such extensions are less expensive and time consuming than building new plants. However, because of the age and condition of such plants, such extensions may not be reliable.

> DOE estimates that plants accounting for about 70 percent of the nation's 1989 total generating capacity represented by fossil fuel plants may undergo life extension by the year 2010.
>
> Historically, older power plants have tended to develop operational problems and require increased maintenance. As plants age, critical components degrade due to factors such as fatigue, erosion, and corrosion. Plants over 30 years old break down more frequently than do newer plants, and the time it takes to repair the older plants increases. According to a DOE official, an ongoing study conducted for the agency shows that generally the efficiency and availability of older plants tend to decrease and the costs for operation and maintenance tend to increase.
>
> • * * •
>
> The general goal of life extension projects is to keep plants operating at acceptable levels of availability, and, in some cases, to return the plants to their original operating efficiency and maintain that status for an additional 30 years beyond the originally estimated service life. Typically, extending the life of an existing plant costs considerably less than building a new one and does not involve the licensing and permitting requirements of constructing a new plant.
>
> • * * •
>
> No consensus has emerged among utility industry experts on the degree of reliable performance that can be expected from plants with an extended service life. While the comments that we received from utility officials were generally positive, as are those that appear in government and industry publications, the optimism about life extension is tempered with caution. If life extension does not achieve its goal--to keep plants operating at acceptable levels of availability--

> the reliability of the electricity supply could be impaired in some areas of the United States. (Underlining supplied.)

1. Please explain what measures (other than life extensions) will be used to meet "future demand". What will be the role of conservation and new plants?

2. Are such extensions going to be cheaper and less time consuming with enactment of title I of the Clean Air Act bill, S. 1630? Please explain.

3. Please discuss in greater detail the "reliability of the electricity supply" from life extensions, taking into account the "different approaches to life extensions" discussed in the GAO report. Is there reason to be concerned about the reliability of these plants in meeting demand? Please explain. If they are not reliable, what are the contingencies?

4. Do you agree with the demand figures? What are the real and timely alternatives to life extension to meet this anticipated demand?

The GAO also discusses the Clean Air Act requirements for these units or plants.

> When Congress enacted the Clean Air Amendments of 1970, it exempted power plants constructed prior to the publication of EPA's regulations (August 17, 1971) from having to meet the legislated emission standards. The exempt plants produce a disproportionate share of utilities' sulfur dioxide and nitrogen oxide emissions. Although these plants that were exempted from federal regulations are subject to state regulations, the states generally allow emissions at much higher levels than those specified in the Clean Air Act.
>
> • • • •
>
> Enactment of acid rain control legislation similar to amendments proposed by the Bush administration probably would result in significant reductions in emissions of sulfur dioxide and nitrogen oxides from many of the same plants that currently produce the largest share of these emissions. Because some of these are the same plants that are also candidates for life extension, the additional cost of achieving emission reductions could discourage some life extension projects, but utilities generally are expected to find reducing emissions from existing

plants more cost-effective than replacing them and to continue with life extension projects.

* * * *

An acid rain control program that requires more stringent reductions or presents less flexibility in choosing a compliance method than the administration's proposal could alter utilities' plans for life extension. More prescriptive requirements could force utilities to retire more power plants than anticipated, which would reduce the number of plants that would be available for life extension.

Current Environmental Protection Agency (EPA) regulations "assumed that utilities would continue to replace most plants at the end of their traditional 30- to 40- year service life; consequently the regulations do not explicitly address power plant life extensions."

In a 1988 case, the agency ruled that the Clean Air Act's emission standards would apply to a previously exempt power plant if the utility would pursue its life extension project as proposed.

* * * *

In enacting the Clean Air Act Amendments of 1977, Congress revised the New Source Performance Standards (NSPS) and established the Prevention of Significant Deterioration (PSD) program. The NSPS, established by Congress under Clean Air Amendments of 1970, regulate the emissions from new sources, including electric utility power plants. The standards were modified in 1977 to further restrict power plant emissions by requiring the use of emission control technology, typically flue gas desulfurization (FGD) equipment for reducing sulfur dioxide emissions, and other types of emission control equipment for reducing emissions of other regulated pollutants. The PSD program was established to preserve air quality in unpolluted areas of the country by regulating power plants' total annual emissions and, as the NSPS do, by requiring the use of the "best available" emission control equipment. EPA, in formulating the NSPS and the PSD program, included provisions regulating modifications of power plants, but because it did not anticipate life extension, it did not explicitly address life extension projects.

While Congress exempted plants constructed prior to the enactment of the new emission standards, it also instructed EPA to apply the standards where EPA determines a plant has been "modified." In amending the act in 1970, Congress defined a modification as a physical or operational change to an existing facility resulting in an increase in the emission of any controlled pollutants or of pollutants not previously emitted. The NSPS are triggered by any change that increases the hourly emission rate for any controlled pollutant. The PSD program provisions are triggered by any change that increases the total amount of annual emissions for any controlled pollutant. EPA also applies the new emission standards in cases where it determines a plant has been "reconstructed"--a determination applicable if the cost of the alteration exceeds 50 percent of the cost that would be incurred to construct a comparable new facility.

* * * *

Power plant life extension projects involve physical or operational changes to power plants that potentially can invoke either the modification or reconstruction provisions and thus trigger the NSPS and the PSD program provisions.

In September 1988, after the Wisconsin Department of Natural Resources asked for EPA's review of the Wisconsin Electric Power Company's (WEPCO) proposed life extension project, EPA determined that the project would constitute a "modification" under the act and that the plant, if altered as proposed, would be required to meet the act's more stringent emission standards. This decision was the first instance of EPA's requiring a plant undergoing life extension to achieve the NSPS and the PSD program requirements. EPA's ruling was based on a determination that (1) the proposed changes to the power plant would go beyond "routine repair" and would therefore not be exempt and (2) emissions would increase as a result of the project.

The utility challenged EPA's definition of routine repair and its method for calculating increases in emissions. Following litigation, in January 1990 the United States Court of Appeals for the Seventh Circuit affirmed EPA's application of the NSPS, but remanded the decision to apply the PSD program standards back to EPA for further review. Specifically, the Court held that, in this instance, the proposed changes were not

routine and thus not exempt from the standards and that an increased emission rate would result; thus, EPA had correctly applied the NSPS. However, the court ruled that EPA had not used an appropriate method for determining the total annual increase in emissions and instructed EPA to reexamine the application of the PSD program provisions. The Court added that EPA is entitled to broad discretion in interpreting the technical provisions of Clean Air Act and its regulations.

The GAO notes that there is concern about the WEPCO decision's and the application of NSPS and PSD program requirements to "previously exempt" plants. GAO states:

> Because new power plants are subject to more stringent emission standards, there is an incentive to extend the life of existing plants that are not subject to these costly standards. If decisions similar to the WEPCO decision were rendered more often, a decision to build a new plant or extend the service life of an existing plant would depend on the relative costs of two sources emitting pollution at a low rate, and not on a comparison of the high cost of a new plant emitting pollution at a low rate and the lower cost of an older plant emitting pollution at a higher rate.
>
> Officials from seven of the nine utilities we contacted indicated that the WEPCO decision was not interfering with their plans for the continued operation of their existing plants. These officials explained that WEPCO's project involves the restoration of generating capacity at a deteriorated plant and that this situation is unlikely to occur in their systems because their maintenance programs prevent their plants from deteriorating. Officials from one of the nine utilities we contacted indicated that the WEPCO ruling has played a role in the utility's revising its plans. In its annual submission to its public utility commission, this utility explained that because of legislative and regulatory uncertainties (including the uncertainty raised by the WEPCO decision), it has deferred implementing a life extension program. However, the utility reported that it will continue to maintain its plants to ensure their reliable and safe operation. (Underling supplied.)

GAO indicates that EPA officials do not "expect that the ruling will significantly affect utilities' decisions to undertake power plant life extension projects."

> According to EPA policy officials, WEPCO's life extension project is not typical of the majority of utilities' life extension projects, and concerns that the agency will broadly apply the ruling it applied to WEPCO's project are unfounded. The officials noted that many life extension projects do not result in increased emissions, while other activities are routine in nature and thus exempt from the modification rule. Lending evidence to the officials' statements, EPA's 1989 emission forecast assumed that the WEPCO decision would not result in a significant number of additional power plants' having to comply with the NSPS and the PSD program requirements.

5. I am uncertain about this EPA comment as reported by EPA. I can read it several ways, particularly with the word "*significantly.*" What does EPA intend or mean? What is DOE's view? How will WEPCO affect acid rain legislation plants? Please explain. What is the Administration doing to clarify the matter? To what extent is the matter fully in EPA's control? What legal or other challenges are possible or likely? What relevant interpretative rulings has EPA issued or planned? What is their legal effect? How are they helpful? Please consider in your reply the enclosed letter from the National Independent Energy Producers.

Enclosed also is EPA's September 20, 1990 letter regarding two plants. Will they likely be impacted by WEPCO?

I request your reply to the above matters within 30 days after receipt of this letter. Please provide a copy thereof to the GAO for review and comment.

With best wishes.

Sincerely,

JOHN D. DINGELL
Chairman
Subcommittee on
Oversight and Investigations

cc: The Honorable Thomas J. Bliley, Ranking Republican Member
Subcommittee on Oversight and Investigations

The Honorable Philip R. Sharp, Chairman
Subcommittee on Energy and Power

The Honorable Carlos J. Moorhead, Ranking Minority Member
Subcommittee on Energy and Power

The Honorable Henry A. Waxman, Chairman
Subcommittee on Health and the Environment

The Honorable Edward R. Madigan, Ranking Minority Member
Subcommittee on Health and the Environment

The Honorable Martin L. Allday, Chairman
Federal Energy Regulatory Commission

The Honorable Richard G. Darman, Director
Office of Management and Budget

Mr. Thomas Kuhn, Executive Vice President
Edison Electric Institute

Ms. Merribel S. Ayres, Executive Director
National Independent Energy Producers

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 20 1990

OFFICE OF
AIR AND RADIATION

Honorable John D. Dingell
Chairman, Committee on Energy
and Commerce
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

Your June 13, 1990 letter raises the issue of job loss as a result of the acid rain control provisions of the proposed clean air amendments. We are aware of the potential impact on employment. For this reason, we endeavored to provide the maximum amount of flexibility in the legislation for sources and States to choose the path most acceptable to them. We anticipate that this will result in decisions being made at the State and local level where the most acceptable balance can be struck among jobs, electric rate impacts, and other local environmental impacts.

The Muskingum River and Kammer plants have burned high sulfur coal for many years. During this time the economic savings of using cheaper fuel have been passed along to the customers. However, the Kammer plant is now over 30 years old. Within the next 5 or 10 years, irrespective of new legislation, the plant likely will need to be refurbished, repowered, or replaced. In addition, the stack height provisions in the Clean Air Act will in a number of cases require emission limits more stringent than those necessary either to meet ambient standards or to comply with the new acid deposition control requirements. This is so in the case of the Kammer plant which is not in compliance with the stack height regulations promulgated in 1985 or the federally approved state implementation plan (SIP) promulgated in 1973. Therefore, it appears that regardless of whether the new legislation applies to these units, the cost of providing electricity to Ormet will increase and the job issue will arise.

In fact, compliance with current requirements could bring emissions down to levels close to those required in Phase 1 of the proposed acid rain program. In addition, under Section 504 (c) [404 (b) of the Senate bill] emission reductions required of Kammer, for example, could be achieved at other plants in the utility system through the substitution process. This could potentially lessen employment impacts.

I appreciate your concerns, but I believe the legislation contains the flexibility to prevent or mitigate the potential job losses you have identified. If you have further questions, please don't hesitate to contact me.

Sincerely,

William G. Rosenberg
Assistant Administrator
for Air and Radiation

cc: Honorable Norman F. Lent
Honorable Philip R. Sharp
Honorable Carlos J. Moorhead
Honorable Douglas Applegate

EXHIBIT 9
TO DEFENDANTS' MEMORANDUM OF LAW IN SUPPORT OF MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 19 1991

OFFICE OF
AIR AND RADIATION

Honorable John D. Dingell
Chairman, Subcommittee on Oversight
and Investigations
Committee on Energy and Commerce
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for enclosing a copy of the September 1990 GAO report entitled "Electricity Supply -- Older Plants' Impact on Reliability and Air Quality" with your October 9, 1990 letter. Your letter raises several questions concerning the impact of older power plants' "life extension" on the reliability of electricity supply. Enclosed are responses to your questions.

If you have any further questions, please do not hesitate to contact us.

Sincerely yours,

William G. Rosenberg
Assistant Administrator
for Air and Radiation

Enclosure

cc: Honorable Charles A. Bowsher
Comptroller General, GAO

Question 1.

Please explain what measures (other than life extensions) will be used to meet "future demand". What will be the role of conservation and new plants?

Response 1.

The role of renewable resources and especially conservation in meeting current demand is significantly higher than 10 years ago, despite regulatory obstacles, inequitable incentives and insufficient research and development support. In fact, few conventional electric generation options can today compete with energy efficiency investment to meet future demand. Recent estimates suggest that energy demand can be halved by 2010 with a savings of over 4300 billion to the U.S. economy.

The cost-competitiveness of conservation and renewable resources will be further increased by the Clean Air Act Amendments of 1990 and assessments of environmental externalities. Preventing significant increments of pollution through energy efficiency can be an important supplement to "end of smokestack/scrubber" technologies.

In addition to lower capital costs, lower financial risks, high reliability and pollution prevention benefits, energy efficiency is achieved by investing in the operation and maintenance of the various energy-consuming sectors of the economy. Any improvements in energy productivity (increasing economic output with stable or declining energy input) will simultaneously enhance national energy security and the international competitiveness of American business. Finally, the development of a competitive "efficiency and renewable resource industry" to compete with such German and Japanese initiatives will be another by-product of this quicker, cheaper, cleaner approach to future demand.

Question 2.

Are such (life) extensions going to be cheaper and less time consuming with the enactment of title I of the Clean Air Act bill, S. 1630? Please explain.

Response 2.

Title I does not have much direct bearing on life extension projects. New source review is only implicated by life extension projects to the extent that they increase emissions and are thus considered modifications under Part C or D. As discussed in the answer to question 5, companies have and use discretion in

project design and permitting to avoid increasing emissions and triggering the modification provisions. However, even if they could not or did not "net out" of new source review, power plant modifications would not face any significantly different treatment under the amendments in SO2 or PM-10 nonattainment areas. Of course, if, due to a SIP call in a nonattainment area the state required the power plants to reduce their emissions, presumably the state would apply such a requirement to existing sources without regard to whether they were undergoing modification. In that case the cost of pollution controls would be attributed to the nonattainment program rather than the new source review program.

In ozone nonattainment areas where major stationary sources of NOx would be required to meet the same requirements as major stationary sources of VOC, under Section 182(f) of the amendments, power plants would be subject to the RACT provisions. Power plants undergoing a covered modification (under the new source review program) would have to achieve LAER instead. Like all major stationary sources in these areas, they would also have to procure offsets at the ratios stipulated for the various nonattainment severity categories. The cost of NOx offsets (if they were required) would thus increase the cost of a modification.

Question 3.

Please discuss in greater detail the "reliability of the electricity supply" from life extensions, taking into account the "different approaches to life extensions" discussed in the GAO report. Is there reason to be concerned about the reliability of these plants in meeting demand? Please explain. If they are not reliable, what are the contingencies?

Response 3.

EPA has not looked into the issue of "reliability of electricity supply" from life extensions.

Question 4.

Do you agree with the demand figures? What are the real and timely alternatives to life extension to meet this anticipated demand?

Response 4.

The demand figures are included in a statement, quoted below, that appears on page 8 of the GAO report.

> The Department of Energy (DOE) and industry experts predict that demand for electricity will increase through the 1990s, outstripping planned additions to generating capacity. In 1989 the nation's total electric generating capacity was about 684,000 megawatts (MW). DOE projects a need for an additional 102,000 MW capacity by the year 2000, and utilities have made plans to construct plants that will produce only about one-third of this additional amount. Also, in 1989 the North American Electric Reliability Council (NERC) projected that utilities' planned additions would be insufficient by 1998. Moreover, according to NERC, some areas of the eastern United States will be at serious risk of supply disruptions in the early 1990s if the demand for electricity reaches the high end of the organization's forecast.

First of all, it is important to note the distinction between the capacity supply and capacity demand estimates. Increase in electric demand (in gigawatts) between 1989 and 2000 refers to the increase in annual peak demand by 2000. Increase in "capacity demand" is defined to include the change in peak demand plus a planning or required reserve margin. The increase in generating capacity needed (or "capacity supply") estimates reflect the difference between current (1989) electric generating capacity estimates (including cogeneration and imports) and future capacity needs (which are assumed to equal the "capacity demand" estimates). Because there is excess capacity in some areas of the country today, the required increase in supply will be less than the forecasted increase in demand. The DOE statement cited by GAO appears to refer to a required increase in capacity supply, and the NERC forecasts refer only to capacity demand (as well as planned capacity additions).

Growth in capacity demand (1989-2000) forecasted by NERC and adjusted for 2000 is about 207 gigawatts, and falls within the range forecasted in the EPA high and low base cases for the new acid rain provisions in the Clean Air Act (about 138-213 gigawatts). EPA agrees with the NERC demand capacity figure.

The increase in generating capacity supply needed (1989-2000) cited by GAO as DOE's forecast is 102 gigawatts. This is less than assumed in the EPA base cases. Note however, according to DOE/EIA "1990 Annual Energy Outlook", the increase in capacity supply needed was forecasted to be 186 gigawatts,

which is in the upper end of the range assumed in the EPA base cases. So EPA is unsure of GAO's statement regarding DOE's forecast of 102 gigawatts.

Question 5.

I am uncertain about this EPA comment as reported by EPA. I can read it several ways, particularly with the word "significantly." What does EPA intend or mean? What is DOE's view? How will WEPCO affect acid rain legislation plants? Please explain. What is the Administration doing to clarify the matter? To what extent is the matter fully in EPA's control? What legal or other challenges are possible or likely? What relevant interpretative rulings has EPA issued or planned? What is their legal effect? How are they helpful? Please consider in your reply the enclosed letter from the National Independent Energy Producers.

Response 5.

Some background on the NSPS and PSD programs and the life extension project at WEPCO's Port Washington, Wisconsin facility, may be helpful to respond to these questions. As noted in the GAO report, Congress dictated that modifications at existing plants be treated as new sources for purposes of the NSPS and PSD (as well as nonattainment new source review) provisions of the Clean Air Act. The Act defines modification as: 1) a physical or operational change that 2) increases emissions. Under the NSPS program, emissions increases are measured in terms of hourly potential emissions, while PSD considers increases in annual actual emissions. EPA's regulations contain several limitations on the broad statutory language, including, for example, an exemption for routine changes.

In addition, EPA regulations contain broad "netting" provisions that enable source owners to offset emissions increases with equivalent reductions and thereby avoid the applicability of new source emissions standards or BACT limits. Under NSPS, netting may occur within the affected facility (e.g., an individual utility boiler) and involve physical restrictions on emissions capabilities (such as addition of pollution control equipment). Under PSD and nonattainment area new source review, netting may occur within the entire plant and may involve operational as well as physical restrictions on the plant's emissions.

Prior to the WEPCO court decision, EPA applied a "current actual" to "future potential" test to all nonroutine changes at existing plants in determining emissions increases under the PSD

bubble rule. That is, EPA assumed initially that following the changes, the plant would operate at its full potential to emit. Source owners could -- and frequently did -- avoid PSD applicability, however, through legally binding physical or operational limitations restricting actual emissions to levels not significantly greater than levels prior to the change. The owner would estimate the source's actual emissions following the change. If the owner projected that the source likely would not increase its actual emissions following the change, it would accept an actual emissions "cap." However, if the projection later proved inaccurate, and the owner desired to increase the source's actual emissions, it would need to obtain a new source permit at that time. As a result of the WEPCO court decision, modifications involving "like-kind" replacements, such as the WEPCO life extension project itself, now will be able to use a "current actual" to "future actual" test for PSD applicability purposes. In essence, this means that EPA, rather than the source owner, is responsible for accurately projecting a plant's actual emissions following a modification to determine whether the plant's emissions are within the bubble. If EPA projects no actual emissions increase, the source's emissions would not be legally capped.

Regarding WEPCO's life extension project, due to age-related deterioration and loss of efficiency, both the physical capability and actual utilization of the WEPCO power plant had greatly declined over time. The project involved the replacement of major internal components at all five of WEPCO's existing coal-fired steam electric boilers at its Port Washington plant. This project would restore the physical and economic viability of the existing powerplant and extend its useful life for approximately 20 years. In its decision regarding WEPCO, EPA determined that the physical changes contemplated by the proposed project were nonroutine in nature and consequently were not categorically excluded from PSD or NSPS modification requirements. As indicated in the GAO report, it is expected that most utility projects will not be similar to the WEPCO situation. That is, EPA believes that most utilities conduct an ongoing maintenance program at existing plants which prevents deterioration of production capacity and utilization levels. To the extent that life extensions at such plants involve only an enhanced maintenance program, new source requirements may not apply for two reasons. First, the life extension may involve no nonroutine physical or operational change. If so, it would be excluded from new source provisions for that reason alone. Even if the life extension did involve nonroutine changes, it still would not trigger new source requirements if it did not increase pollution on an hourly basis (for NSPS purposes) or an annual basis (for PSD and nonattainment new source review purposes). It should also be noted that WEPCO is not a Clean Coal Technology or repowering project, nor is it (1) being implemented to comply with Title IV or any other Clean Air Act requirements, or (2) a

basis (for PSD and nonattainment new source review purposes). It should also be noted that WEPCO is not a Clean Coal Technology or repowering project, nor is it (1) being implemented to comply with Title IV or any other Clean Air Act requirements, or (2) a voluntary pollution control project or research project of any kind. EPA's WEPCO decision only applies to utilities proposing "WEPCO type" changes, i.e., nonroutine replacement that would result in an actual emissions increase. This is the basis for the EPA statement that the ruling is not expected to significantly affect power plant life extension projects.

In addition, it is important to point out that GAO was incorrect in its formulation of the choice that utility companies actually face. GAO stated that the utility company judgment on whether to build a new plant or instead to extend the service life of an existing plant depends on the relative costs of "two sources emitting pollution at a low rate, and not on a comparison of the high cost of a new plant emitting pollution at a low rate and the lower cost of an older plant emitting pollution at a higher rate." In fact, as explained above, due to EPA's netting rules, the owner of an existing source almost always has the choice of merely avoiding increases in emissions at existing plants, and is not required to meet the stringent emissions limits that apply to wholly new sources. Thus, using the nomenclature of the GAO report, the utility's choice is indeed between a new, "lower" emitting plant and an older, "higher" emitting plant. The only condition EPA has ever placed on the latter option is to insist that the source owner prevent the older plant from emitting at even higher levels.

EPA recently proposed a rule (copy enclosed) that would revise the agency's Prevention of Signficant Deterioration (PSD) and nonattainment New Source Review regulations for the addition, replacement or use of pollution control projects (a project undertaken at a utility unit to reduce emission) at existing electric utility steam generating units. Changes that occur at a source that are intended to restore capacity or to improve the operational efficiency of the facility are not considered to be part of a pollution control project for purposes of this proposal. The proposal would not include pollution control projects as modifications, unless the reviewing authority determines that the project will render the unit less environmentally benefirical. Until the proposal is final, EPA will continue its current policy of determining of pollution control projects are excluded from NSR on a case-by-case basis. The implementation of the proposed rule should not cause any negatice environmental effects.

EXHIBIT 10
TO DEFENDANTS' MEMORANDUM OF LAW IN SUPPORT OF MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

II-C-46

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR AND RADIATION

MAY 31 1995

Mr. William H. Lewis
Morgan, Lewis and Bockius
1800 M Street, N.W.
Washington, D.C. 20036-5869

Dear Mr. Lewis:

As you know, the Environmental Protection Agency (EPA) is committed to working with industry and other stakeholders to develop flexible solutions to address the implementation concerns raised with our programs. Thanks in a large part to your initiative, we were able to hold a successful meeting with you and over 55 of your colleagues to discuss implementation issues of concern. I am providing our responses to the issues raised by the industry representatives at the April 12, 1995 meeting.

The EPA has made considerable progress in developing rules and guidance that take into consideration many of your concerns. Several of the concerns you raised are being addressed in rulemaking packages that are underway for new source review reform and operating permits. In addition, we are holding stakeholder meetings on enhanced monitoring and section 112(g). EPA is also developing guidance in several areas that will help clarify a number of the uncertainties that have been raised in the industry comments.

I look forward to continue working with you as we move forward in developing rules that work for all parties and foremost in achieving clean air for all our citizens.

Sincerely yours,

Mary D. Nichols
Assistant Administrator
for Air and Radiation

Attachment

EPAOAQ 0020477

ENVIRONMENTAL PROTECTION AGENCY
(EPA)

RESPONSE TO ISSUES RAISED BY INDUSTRY ON CLEAN AIR ACT IMPLEMENTATION REFORM

May 30, 1995

TABLE OF CONTENTS

EPA'S RESPONSE TO ISSUES RAISED BY INDUSTRY ON CLEAN AIR ACT IMPLEMENTATION REFORM

EPA'S RESPONSE TO INDUSTRY CONCERNS ON CLEAN AIR ACT IMPLEMENTATION REFORM

On April 12, 1995, EPA met with 55 industry representatives to discuss issues they had raised and to indicate what actions EPA intends to take on the issues. The specific issues raised by the various industry representatives and EPA's responses to those issues are attached. The vast majority of issues raised by industry were not new to EPA; the Agency has been working with industry representatives and other stakeholders for several months trying to find cost-effective, common sense solutions to these often complex issues.

It is also important to note that the responses included in this document reflect the Agency's positions as of mid-May 1995. On several of these issues, notably operating permits and 112(g), EPA is in the midst of reevaluating its programs in light of recent feedback from various stakeholders. In June 1995 EPA will meet with the Clean Air Act Advisory Committee to discuss options for addressing section 112(g). EPA is also currently working out final details of a proposed supplemental rule on operating permits and will shortly make available additional information about that proposal.

Enhanced Monitoring

In general, EPA agrees with concerns raised about the enhanced monitoring rule and has withdrawn the package from review by the Office of Management and Budget. EPA hopes to develop a strategy that will allow it to issue compliance assurance requirements that build on the requirements of existing rules and ensure that the environmental results expected from those rules are being achieved. EPA received an extension of the court-ordered deadline until June 30, 1995. EPA intends to seek a further extension of at least a year to allow time for stakeholder involvement in development of the rule. One of the first steps EPA will take is to hold a stakeholders' meeting on May 31, 1995. EPA will work with representatives from industry, states, and environmental groups to obtain their assistance in developing a new flexible approach for the enhanced monitoring rule.

Operating Permit Program

Over the next month EPA plans to make several significant improvements to the permit program that will enhance a facility's ability to make process or operational changes without revising its Title V permit, make far greater use of existing State permit programs for purposes of Title V, and reduce the costs and burdens of developing permit applications. Some of these changes are described below. EPA intends to make available information about the other changes shortly.

Response:

- EPA agrees with removing the routine maintenance, repair and replacement language from the proposal package.

- With other changes being made to NSR applicability, this issue becomes less important. Both PALs and the Clean Unit Test (included in the NSR Reform proposal rule) will provide clear distinction of the types of changes that can be undertaken without triggering NSR.

Issue 6: **A "Restoration" Exclusion: A new exclusion, based on the "results in" language in the modification definition, should be included for activities that restore a unit to the highest capacity achievable in the previous five years. The exclusion would be limited in time and would recognize that requirements governing the timing of capital expenditures vary depending upon market conditions, and may not allow an industry to make a capital investment to restore operations immediately after a problem occurs. It would also recognize that units that have deteriorated over more than a five year period of time should be evaluated under other tests. This is consistent with the WEPCO rule's implementation of the "causal link" requirement though the rule's focus on "representative baseline" year conditions in the definition of "representative actual annual emissions."**

Response:

- EPA believes the issue of how restoration of lost capacity should be treated for NSR applicability purposes is better resolved by the PAL, the Clean Unit Test, and other mechanisms in the NSR Reform package that provide sources with considerable flexibility to make changes. EPA believes that the routine maintenance exclusion already included in the existing NSR regulations also has the effect of excluding "routine restorations."

Issue 7: **"Clean Unit" Exclusion: Establish an exclusion for sources that have installed BACT equivalent level of control or MACT or reasonably available control technology (RACT) or their equivalent, under a state or voluntary control program. Units that have undergone NSR should be subject to the "allowable-allowable" test discussed in the following issue.**

EXHIBIT 11
TO DEFENDANTS' MEMORANDUM OF LAW IN SUPPORT OF MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

FOR IMMEDIATE RELEASE

ENR

WEDNESDAY, NOVEMBER 3, 1999

DOJ (202) 514-2008

WWW.USDOJ.GOV

EPA (202) 260-1387

TDD (202) 514-1888

U.S. SUES ELECTRIC UTILITIES IN UNPRECEDENTED ACTION TO ENFORCE THE CLEAN AIR ACT

Complaints Filed After One of the Largest Enforcement Investigations in EPA History

WASHINGTON, D.C. - The Justice Department, on behalf of the EPA, today filed seven lawsuits against electric utility companies in the Midwest and South, charging that 17 of the companies' power plants illegally released massive amounts of air pollutants for years, which have contributed to some of the most severe environmental problems facing the United States today. The EPA today also issued an administrative order against the Tennessee Valley Authority, charging the federal agency with similar violations at seven plants.

The seven separate suits allege that the electric utility companies -- American Electric Power, Cinergy, FirstEnergy, Illinois Power, Southern Indiana Gas & Electric Company, Southern Company, Tampa Electric Company -- or their subsidiaries, and the TVA , violated the Clean Air Act by making major modifications to many of their plants without installing the equipment required to control smog, acid rain and soot.

"When children can't breathe because of pollution from a utility plant hundreds of miles away, something must be done," said Attorney General Janet Reno. "Today's actions will help clean the air and make us breathe a little easier."

For years, the 24 power plants have operated without the best available emissions-control technology, increasing air pollution near the facilities and far downwind of the plants, along the Eastern Seaboard. In addition to the lawsuits and administrative order filed today, the EPA issued notices of violations to the utilities, naming an additional eight plants where the agency maintains similar violations occurred.

The 32 plants targeted today are located in Alabama, Florida, Georgia, Illinois, Indiana, Kentucky, Mississippi, Ohio, Tennessee, and West Virginia.

"As a result of one of the largest enforcement investigations in EPA history, we are today taking action to cut illegal and excessive air emissions from 32 coal-fired power plants throughout the Eastern half of the United States," said EPA Administrator Carol M. Browner. "This action will dramatically reduce the harmful smog and acid rain that directly threatens public health and the environment throughout the Midwest and up and down the East Coast."

By taking this unprecedented action, the United States aims to reduce dramatically the amount of sulfur dioxide, nitrogen oxides, and particulate matter that electric utility plants release into the atmosphere. The lawsuits -- filed in U.S. District Courts in Atlanta, Indianapolis, Tampa, East St. Louis, Ill., and Columbus, Ohio -- seek to force the facilities to install appropriate air pollution-control technology. Similarly, EPA's order directs TVA to install control technology that will significantly reduce SO2 and NO_x emissions.

The United States will seek significant civil penalties from all these violators. The Clean Air Act authorizes civil penalties of up to $25,000 for each day of violation at each plant prior to January 30, 1997, and $27,500 for each day thereafter.

Power plants existing at the time the Clean Air Act was amended in the late 1970s were "grandfathered." Therefore, utility companies were not required to retrofit those existing plants with new air pollution control equipment, unless the utilities undertook major modifications of those plants. The government asserts that the utilities each made major modifications to their plants in order to extend their lives and avoid the cost of building new plants. These projects included replacing large portions of the boilers that are the heart of the plants. Many of these actions cost tens of millions of dollars and took years to complete. Under the Clean Air Act, modifications of this kind require installation of the "best available control technology," but the utilities did not do so.

The utilities' failure to install this equipment resulted in tens of millions of tons of sulfur dioxide, nitrogen oxides, and particulate matter illegally emitted into the air, according to the government, leading to adverse environmental and health impacts. Each year, these plants release nearly three million tons of pollutants -- more than two million tons of sulfur dioxide (SO2) and almost one million tons of nitrogen oxides (NOx).

Collectively, electric utility plants in the United States account for nearly 70 percent of sulfur dioxide emissions each year and 30 percent of nitrogen oxides emissions. In addition to detrimental health effects on asthma sufferers, the elderly and children, power plant emissions have been linked to forest degradation, waterway damage, reservoir contamination, and deterioration of stone and copper in buildings.

- **Sulfur dioxide** interacts in the atmosphere to form sulfate aerosols, which can travel long distances through the air and can be inhaled. The inhalation of high levels of sulfate aerosols is associated with increased sickness and mortality from lung disorders, such as asthma

and bronchitis.

- **Nitrogen oxides** are major producers of ground-level ozone, or smog, which can decrease lung function -- especially among children who are active outdoors -- and aggravate respiratory problems. Nitrogen oxides are also transformed into nitrogen dioxide, a dangerous pollutant that can constrict lower respiratory passages, create difficulty in breathing, and weaken immune systems.

- **Sulfur dioxide and nitrogen oxides** interact in the atmosphere with water and oxygen to form nitric and sulfuric acids, commonly known as **acid rain**. Acid rain, which also comes in the form of snow or sleet, "acidifies" lakes and streams and damages trees at high elevations. It also accelerates the decay of building materials and paints, including irreplaceable buildings, statues, and sculptures that are part of our nation's cultural heritage.

- **Particulate matter** is often called soot. Breathing high concentrations of particulate matter can damage lung tissue and contribute to cancer and respiratory disease.

###

99-524

EXHIBIT 12
TO DEFENDANTS' MEMORANDUM OF LAW IN SUPPORT OF MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION

UNITED STATES OF AMERICA,	)	
Plaintiff,	)	
	)	
ALABAMA ENVIRONMENTAL COUNCIL,	)	
	)	
Plaintiff-Intervenor	)	
v.	)	**Case No. 2:01-cv-00152-VEH**
	)	
ALABAMA POWER COMPANY,	)	
	)	
Defendant.	)	

ORDER VACATING IN PART MEMORANDUM ON CORRECT LEGAL TESTS

I. BACKGROUND AND PROCEDURAL POSTURE

On June 28, 2004, this action was reassigned to the undersigned newly appointed judge. A scheduling order was entered on August 5, 2004. (Doc. 68). In response to ¶ (3)of page 2 of that order, the parties[1] agreed that there were two legal issues that were ripe for adjudication: (1) the correct legal test for determining a physical change, including the correct legal test for determining routine maintenance, repair, and replacement ("RMRR"); and (2) the correct legal test for determining a

[1] United States of America, Plaintiff ("United States"), Alabama Environmental Council ("AEC"), Plaintiff-Intervenor, and Alabama Power Company ("APC"), Defendant. The Plaintiffs will be collectively referred to as "EPA" unless the context indicates otherwise.

significant net emissions increase. After the parties had briefed those issues, the court issued a Memorandum on Correct Legal Tests. (Doc. 140).

After court-ordered mediation, the parties stipulated to certain facts.[2] APC moved for summary judgment. On August 14, 2006, the court entered Final Judgment in favor of APC. (Doc. 175). EPA filed a Motion to Clarify the Final Judgment Order. (Doc. 176). APC opposed the Motion. (Doc. 177). An Amended Order granting EPA's motion to clarify in part and denying the motion in part was entered on August 28, 2006. (Doc. 179). EPA appealed. (USCA 06-15456F).

By motion dated October 27, 2006, EPA moved the Eleventh Circuit to stay the appeal pending resolution of the Supreme Court's decision in *Environmental Defense v. Duke Energy Corp.*, 549 U.S. __, 127 S. Ct. 1423 (2007) (*Duke Energy III*).[3] APC filed an Opposition to EPA's Motion to Stay on October 30, 2007. On November 14, 2006, the Eleventh Circuit stayed the appeal to await *Duke Energy III.*

After *Duke Energy III* was issued, APC moved, on April 11, 2007, to Lift Stay and Reset Briefing Schedule. On April 26, 2007, EPA filed a Motion to Vacate and

---

[2] They also agreed to a Partial Consent Judgment, which the court entered and certified as final on June 19, 2006. That Partial Consent Judgment resolved all issues in the case relating to the Miller Plant.

[3] EPA refers to the original (Middle District of North Carolina) court decision as *Duke Energy I*, the Fourth Circuit's decision as *Duke Energy II*, and the Supreme Court's ruling as *Duke Energy III*. While this is not the Eleventh Circuit's practice, for consistency's sake, this court will adopt that nomenclature unless the context clearly indicates otherwise.

Remand, combined with its Opposition to APC's Motion to Lift Stay.

By Order entered June 7, 2007, the Eleventh Circuit on its own motion further stayed the appeal for thirty (30) days to allow EPA or AEC, or both, to apply to this court for Rule 60(b) relief. In its Order, the Court said that if the Rule 60(b) motion were filed, and this court indicated its belief that the 60(b) motion arguments had merit, the Plaintiffs could then ask the Eleventh Circuit to remand the action to this court for the entry of an Order granting the Rule 60(b) Motion. *See Mahone v. Ray*, 326 F.3d 1176, 1180 (11th Cir. 2003). The Eleventh Circuit subsequently extended the thirty (30) day period for the filing of a Rule 60(b) motion.

On July 23, 2007, the United States timely filed a Rule 60(b) Motion. (Doc. 184). APC opposed the Motion. (Doc. 189). The United States filed a Reply to APC's Opposition on August 27, 2007. (Doc. 190).

On October 5, 2007, this court entered an Order on the United States' Motion For Relief from Judgment. (Doc. 191). The Order was, by design, equivocal. The court was not prepared to rule, without the benefit of any briefing or argument from the parties, that it would grant a Rule 60 motion <u>in its entirety</u>. (Doc. 191 at 7 - 9.). That the motion would be granted in part was a foregone conclusion; *Duke Energy III* abrogated this court's ruling on how emissions increases are measured. In issuing the Rule 60 Order, it was this court's intention to indicate that it would vacate the

emissions increase portion of this court's judgment, but that it was not prepared at that time to say it would also vacate that part of its Memorandum on Correct Legal Tests that dealt with the second legal test established therein: EPA's Routine Maintenance Repair and Replacement ("RMRR") exclusion to NSR/PSD permitting requirements. It was this court's intent to defer to the Eleventh Circuit should that Court choose to proceed to review the court's ruling on the RMRR issue. As noted, it was clear that either the Eleventh Circuit or this court would, at the appropriate time in response to *Duke Energy III*, vacate that portion of this court's ruling and judgment that decided the emissions measurement issue.

On October 15, 2007, in response to this court's Order on the United States' Motion For Relief from Judgment, the United States, this time joined by AEC, filed in the Court of Appeals a second motion to vacate and remand or, in the alternative, for a limited remand to permit this court to entertain a Rule 60(b) Motion they would file were their motion to remand granted. On October 26, 2007, APC filed its Opposition to the second motion to vacate and remand while reiterating its opposition to the first motion to vacate and remand. EPA filed a Reply on November 2, 2007.

On December 21, 2007, the Eleventh Circuit stated that this court could have fully addressed the merits of the parties' arguments in its Order on the United States' Motion For Relief from Judgment, but that this court had noted in its Order the

"obvious applicability" of *Duke Energy III* to the judgment on appeal. Accordingly, the Eleventh Circuit granted EPA's renewed motion for vacatur and remand, vacated this court's judgment, and remanded the action for further proceedings consistent with *Duke Energy III.* The Eleventh Circuit denied all remaining motions as moot.

II. <u>DISCUSSION</u>

Because the Supreme Court, in *Duke Energy III*, spoke directly to the "increase in emissions" issue, a portion of the Court's Memorandum on Correct Legal Tests (doc. 140), specifically, this court's second ruling that:

> 2) Emission increases, for purposes of NSR/PSD analysis, are calculated only on the basis of "maximum hourly emission rates", not "annual actual emissions". Maximum hourly emissions must increase before PSD permitting is triggered; greater annual facility utilization is irrelevant to the analysis

is due to be vacated.

APC has filed a new Motion for Summary Judgment. (Doc. 193). EPA and AEC have filed a Joint Opposition to APC's Motion. (Doc. 195). APC has filed a Reply to EPA's Opposition. (Doc. 196). In its Motion and Reply, APC asserts it is entitled to summary judgment based on the court's ruling on the first question answered in the Court's Memorandum on Correct Legal Tests:

> 1) The [routine] exclusion applies to projects that are routine within the industry, by which is meant work of a type performed commonly within the industry, although perhaps infrequently at any specific one or more

of APC's particular plants
(Doc. 140, 372 F.Supp.2d 1283, 1306-07).

The court thinks it will be easier on the parties and any reviewing court to address APC's summary judgment motion, EPA's Opposition, and APC's reply by separate opinion and order. The alternative would be cumbersome and confusing, *i.e.*, going back through Docs. 140, 173, 174, and 179, eliminating the sections and discussions dealing with the second question in the Memorandum on Correct Legal Tests (because those portions are abrogated by *Duke Energy III*), while retaining and revising, where necessary, those portions still applicable to APC's motion.

III. ORDER

For the reasons stated above, the court's second ruling in its Memorandum on Correct Legal Tests (doc. 140) is hereby **VACATED.** APC's pending Motion for Summary Judgment remains under submission.

DONE and **ORDERED** this the 25th day of February, 2008.

VIRGINIA EMERSON HOPKINS
United States District Judge

EXHIBIT 13
TO DEFENDANTS' MEMORANDUM OF LAW IN SUPPORT OF MOTION TO ESTABLISH CORRECT LEGAL STANDARD ON THE ISSUE OF "ROUTINE MAINTENANCE, REPAIR AND REPLACEMENT" ("RMRR")

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

AVENAL POWER CENTER, LLC Plaintiff, v. U.S. ENVIRONMENTAL PROTECTION AGENCY and LISA P. JACKSON, in her capacity as Administrator of the U.S. Environmental Protection Agency Defendants.	)	Case No.: 1:10-cv-00383-RJL (Hon. Richard J. Leon)

DECLARATION OF REGINA MCCARTHY

I, Regina McCarthy, declare under penalty of perjury under the laws of the United States of America that the following is true and correct to the best of my knowledge, information and belief, and is based on my own personal knowledge or on information contained in the records of the United States Environmental Protection Agency (EPA) or supplied to me by EPA employees.

1. I am the Assistant Administrator of the Office of Air and Radiation in EPA, a position I have held since June 2009. The Office of Air and Radiation (OAR) is the EPA office that develops national programs, technical policies, and regulations for controlling air pollution. OAR's assignments include the protection of public health and welfare, pollution prevention and energy efficiency, air quality, industrial air pollution, pollution from vehicles and engines, acid rain, stratospheric ozone depletion, and climate change.

2. OAR is responsible for development of National Ambient Air Quality Standards and the development and implementation of regulations, policy, and guidance associated with the Prevention of Significant Deterioration (PSD) permitting program.

3. Prior to joining EPA, I served as the Commissioner of the Connecticut Department of Environmental Protection. I have worked at both the state and local levels on critical environmental issues, and helped coordinate policies on economic growth, energy, transportation and the environment. I have a B.A. in Social Anthropology from the University of Massachusetts at Boston and a joint M.S. in Environmental Health Engineering and Planning and Policy from Tufts University.

4. On February 9, 2010, EPA issued a National Ambient Air Quality Standard (NAAQS) for hourly concentrations of nitrogen oxides ("hourly NO2 standard").

5. In a prior declaration, I testified that applicants seeking PSD permits to construct stationary sources of air pollution have experienced unforeseen challenges with the preparation and review of information to predict the impact of proposed sources on hourly NO2 concentrations. This gave rise to an EPA policy review that has now proceeded to the point that the agency can more specifically explain how it intends to move forward with action on the PSD permit application submitted by Avenal Power Center ("Avenal"). See paragraphs 5-8, Declaration of Regina McCarthy (January 7, 2011).

6. As part of this policy review, EPA has determined that it is appropriate, under certain narrow circumstances, to grandfather certain PSD applications from the requirement to demonstrate that the proposed facility will not cause or contribute to a violation of the hourly NO2 standard. In addition, EPA believes the factors that justify such an approach for the hourly NO2 standard also provide a basis not to subject these same permit applications to additional permitting requirements that have taken effect during the period of time these permit applications have been pending and permit applicants have been seeking to compile the additional information necessary to demonstrate that the source will not cause or contribute to a violation of the hourly NO2 standard. The PSD permit application submitted by Avenal in 2008 is among those PSD permit applications that EPA believes it is appropriate to grandfather from these additional requirements, particularly in light of EPA's statutory obligation to grant or deny a complete PSD permit application within one year and other circumstances present in this case. EPA will propose to extend similar relief to other permit applicants that can show they are similarly situated. This determination represents a change in the position EPA has taken in this matter and in previous interpretive statements issued by EPA, including statements cited by EPA to support its Cross Motion for Summary Judgment in this litigation.

7. Because this change in position requires that EPA modify or narrow previous interpretations of EPA regulations and the position EPA has taken in public statements to this court regarding this permit, the Agency reads applicable regulations and case law to require that the EPA provide the public with an opportunity to comment on this proposed action before the Agency can issue a final decision on the pending permit application that exempts Avenal from these additional requirements.

8. EPA intends to issue a supplemental public notice that will request comment on EPA's proposal to approve Avenal's application without requiring a demonstration that this source will not cause a violation of the hourly NO2 standard. In addition, this notice will also request comment on EPA's proposal not to require this source to meet emissions limitations for greenhouse gases or to demonstrate that the proposed source will not cause or contribute to a violation of the National Ambient Air Quality Standards for hourly concentrations of sulfur dioxide which became effective on August 23, 2010. The notice will also inform interested persons of the opportunity to provide comments on these subjects at a public hearing.

9. As a result of a recent ruling by the EPA Environmental Appeals Board, EPA has also determined that it is necessary to supplement its analysis of whether minority and low income communities may be disproportionately affected by emissions of NO2 from the Avenal facility. *See, In re: Shell Gulf of Mexico, Inc. and Shell Offshore, Inc.*, OCS Appeal Nos. 10-1 to 10-4, Slip. Op. at 63-81 (EAB December 30, 2010). A copy of this decision may be obtained at

<http://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/OCS+Permit+Appeals+(CAA)?OpenView>.

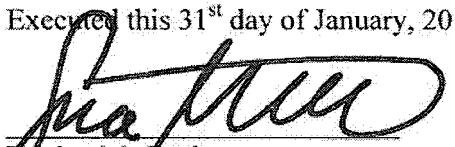
10. EPA is in the process of drafting a supplemental statement of basis to explain its justification for exempting Avenal from these additional requirements described above and to provide a supplemental analysis concerning disproportionate impacts to minority and low income communities. EPA requires an additional 3 weeks to complete this document.

11. Once the document described in paragraph 10 is completed, EPA requires an additional 3 weeks to complete and arrange for publication and direct mail distribution of the public notice. This time is necessary to translate the public notice into Spanish, book the public hearing venue and court reporter to transcribe the hearing, provide advanced copies of the public notice to newspapers for publication, and complete the procurement processes for such services. From the date this notice is published and distributed, EPA will require approximately 5 weeks to complete the public comment and hearing process, in order to allow the 33 days for public comment required by 40 CFR 124.10(b) and 124.20(d) and several additional days for completion of the public hearing. EPA is required to hold a public hearing if requested by any interested person, to provide 33 days notice of such a hearing, and to keep the public comment period open until the hearing concludes. 40 CFR 124.12; 40 CFR 124.10(b)(2); 124.20(d). EPA anticipates based on prior public comments on this permit that a public hearing will be requested. Thus, to expedite the public comment process as much as possible, EPA will provide public notice of the hearing at the same time as public notice of the supplemental statement of basis. In light of the scope of the issues addressed in the supplemental statement of basis, public interest in such matters, and volume of public comments EPA expects to receive, once the comment period ends, EPA will require an additional 6 weeks to consider public comments, prepare responses thereto, and issue a final permit decision in accordance with 40 CFR 124.15.

12. A least four EPA career staff persons and several additional supervisors already familiar with the subject matter are assigned to prepare and review these actions by EPA. The career staff preparing initial drafts of the necessary documents include an Environmental Engineer and Air Permits Manager in EPA's Region 9 office and staff attorneys from both the Region 9 Office of Regional Counsel and the Office of General Counsel at headquarters. At least 5 additional staff and supervisors in Region 9, the headquarters Office of Air and Radiation, and the Office of General Counsel will need to review and approve these actions. The timetable described above cannot be expedited by reassigning additional EPA staff because the time required for such persons to obtain the necessary familiarity with the technical and factual background on this permit application and the issues it presents (and already-assigned staff to train such persons) would offset any benefit from having more manpower involved.

13. After consideration of public comments the Agency may receive in response to this public notice, EPA will be able to complete final action on this permit application by May 27, 2011, as I have previously testified.

Executed this 31st day of January, 2011.



Regina McCarthy

Assistant Administrator
Office of Air and Radiation
United States EPA